

Building Information - Worthington City (45138) - McCord Middle School

Program Type	Assessment Only
Setting	Suburban
Assessment Name	McCord Middle School
Assessment Date (on-site; non-EEA)	2015-09-23
Kitchen Type	Full Kitchen
Cost Set:	2015
Building Name	McCord Middle School
Building IRN	95794
Building Address	1500 Hard Rd
Building City	Columbus
Building Zipcode	43235
Building Phone	614-450-4000
Acreage	20.45
Current Grades:	7-8
Teaching Stations	17
Number of Floors	1
Student Capacity	606
Current Enrollment	503
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	Michael Kuri
Building Type	Middle

[Next Page](#)

North elevation photo:



East elevation photo:



South elevation photo:



West elevation photo:



GENERAL DESCRIPTION

74,518 Total Existing Square Footage
1986 Building Dates
7-8 Grades
503 Current Enrollment
17 Teaching Stations
20.45 Site Acreage

McCord Middle School, which not on the National Register of Historic Buildings, and originally constructed in 1986, is a single story, 74,518 square foot brick school building is located in an suburban residential setting. The existing facility features a conventionally partitioned and open concept design, and does not utilize modular buildings. The structure of the overall facility contains brick type exterior wall construction, with CMU type wall construction in the interior. The floor system consists of slab on grade. The roof structure is metal form deck on steel joist. The roofing system is an EPDM and asphalt shingle, the EPDM was installed in 2011. The classrooms are undersized in terms of the current standards established by the state of Ohio. Physical education and student dining spaces consists of one gymnasium and separate student dining. 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 20.45 acre site adjacent to residential properties. The property is not fenced in for security. Access onto the site is unrestricted. Site circulation is good. There is dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is adequate.

Significant findings in this facility include the overall poor condition of casework as well as a lack of classroom casework in general. Broadloom carpet in the facility is in poor condition and in need of replacement. Roof issues were observed with leaking in the gymnasium. Further investigation into this should be conducted. In order to meet all ADA requirements, modifications and upgrades need to be made for Restrooms, Stage access and signage. There are few windows incorporated into the design and as a result, limited daylighting.

[Previous Page](#)

[Next Page](#)

Building Construction Information - Worthington City (45138) - McCord Middle School (95794)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition
Original Building	1986	yes	1	74,518	no

[Previous Page](#)

[Next Page](#)

Building Component Information - Worthington City (45138) - McCord Middle School (95794)

Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Original Building (1986)		12273		8125	3341		2490	1887						
Total	0	12,273	0	8,125	3,341	0	2,490	1,887	0	0	0	0	0	0
Master Planning Considerations Given the current site configuration and building layout, further additions are not ideal.														

[Previous Page](#)

[Next Page](#)

Existing CT Programs for Assessment

[Next Page](#)

[Previous Page](#)






















Program Type	Program Name	Related Space	Square Feet
No Records Found			

Legend:

Not in current design manual

In current design manual but missing from assessment

Building Summary - McCord Middle School (95794)
























District: Worthington City				County: Franklin		Area: Central Ohio (0)	
Name: McCord Middle School				Contact: Michael Kuri			
Address: 1500 Hard Rd Columbus,OH 43235				Phone: 614-450-4000			
Bldg. IRN: 95794				Date Prepared: 2015-09-23		By: Isaac Ocasio	
				Date Revised: 2015-12-23		By: Holly Grambort	
Current Grades		7-8	Acreage:		20.45		
Proposed Grades		N/A	Teaching Stations:		17		
Current Enrollment		503	Classrooms:		24		
Projected Enrollment		N/A					
Addition		Date	HA	Number of Floors		Current Square Feet	
<u>Original Building</u>		1986	yes	1		74,518	
Total				74,518			
	*HA	=	Handicapped Access				
	*Rating	=1	Satisfactory				
		=2	Needs Repair				
		=3	Needs Replacement				
	*Const P/S	=	Present/Scheduled Construction				
	FACILITY ASSESSMENT Cost Set: 2015						
	A. <u>Heating System</u>		3	\$2,542,554.16 -			
	B. <u>Roofing</u>		2	\$111,000.00 -			
	C. <u>Ventilation / Air Conditioning</u>		3	-\$125,000.00 -			
	D. <u>Electrical Systems</u>		2	\$86,734.90 -			
	E. <u>Plumbing and Fixtures</u>		3	\$238,900.00 -			
	F. <u>Windows</u>		3	\$60,000.00 -			
	G. <u>Structure: Foundation</u>		1	\$0.00 -			
	H. <u>Structure: Walls and Chimneys</u>		3	\$109,000.00 -			
	I. <u>Structure: Floors and Roofs</u>		1	\$0.00 -			
	J. <u>General Finishes</u>		3	\$860,128.20 -			
	K. <u>Interior Lighting</u>		3	\$372,590.00 -			
	L. <u>Security Systems</u>		3	\$212,376.30 -			
	M. <u>Emergency/Egress Lighting</u>		3	\$74,518.00 -			
	N. <u>Fire Alarm</u>		3	\$111,777.00 -			
	O. <u>Handicapped Access</u>		3	\$93,668.60 -			
	P. <u>Site Condition</u>		2	\$227,777.00 -			
	Q. <u>Sewage System</u>		1	\$0.00 -			
	R. <u>Water Supply</u>		1	\$0.00 -			
	S. <u>Exterior Doors</u>		1	\$0.00 -			
	T. <u>Hazardous Material</u>		3	\$7,951.80 -			
	U. <u>Life Safety</u>		2	\$55,000.00 -			
	V. <u>Loose Furnishings</u>		2	\$223,554.00 -			
	W. <u>Technology</u>		3	\$705,685.46 -			
-	X. <u>Construction Contingency / Non-Construction Cost</u>		-	\$1,458,052.93 -			
Total				\$7,426,268.35			
CEFPI Appraisal Summary							
Section		Points Possible		Points Earned	Percentage	Rating Category	
<u>Cover Sheet</u>		—		—	—	—	
1.0 <u>The School Site</u>		100		75	75%	Satisfactory	
2.0 <u>Structural and Mechanical Features</u>		200		144	72%	Satisfactory	
3.0 <u>Plant Maintainability</u>		100		68	68%	Borderline	
4.0 <u>Building Safety and Security</u>		200		146	73%	Satisfactory	
5.0 <u>Educational Adequacy</u>		200		132	66%	Borderline	
6.0 <u>Environment for Education</u>		200		140	70%	Satisfactory	
<u>LEED Observations</u>		—		—	—	—	
<u>Commentary</u>		—		—	—	—	
Total		1000		705	71%	Satisfactory	
<u>Enhanced Environmental Hazards Assessment Cost Estimates</u>							
<u>C=Under Contract</u>							
Renovation Cost Factor				100.00%			
Cost to Renovate (Cost Factor applied)				\$7,426,268.35			
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>							

CEFPI Appraisal Summary					
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<u>LEED Observations</u>	—	—	—	—	—
<u>Commentary</u>	—	—	—	—	—
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[Previous Page](#)

Original Building (1986) Summary

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Address: 1500 Hard Rd Columbus,OH 43235				Phone: 614-450-4000			
Bldg. IRN: 95794				Date Prepared: 2015-09-23		By: Isaac Ocasio	
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		*Rating	=1	Satisfactory			
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			=3	Needs Replacement			
		*Const P/S	=	Present/Scheduled Construction			
FACILITY ASSESSMENT Cost Set: 2015				Rating	Dollar Assessment		
	A. Heating System			3	\$2,542,554.16 -		
	B. Roofing			2	\$111,000.00 -		
	C. Ventilation / Air Conditioning			3	-\$125,000.00 -		
	D. Electrical Systems			2	\$86,734.90 -		
	E. Plumbing and Fixtures			3	\$238,900.00 -		
	F. Windows			3	\$60,000.00 -		
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	P. Site Condition			2	\$227,777.00 -		
	Q. Sewage System			1	\$0.00 -		
	R. Water Supply			1	\$0.00 -		
	S. Exterior Doors			1	\$0.00 -		
	T. Hazardous Material			3	\$7,951.80 -		
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	V. Loose Furnishings			2	\$223,554.00 -		
	W. Technology			3	\$705,685.46 -		
-	X. Construction Contingency / Non-Construction Cost			-	\$1,458,052.93 -		
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Cover Sheet		—		—		—	
1.0 The School Site		100		75		75% Satisfactory	
2.0 Structural and Mechanical Features		200		144		72% Satisfactory	
3.0 Plant Maintainability		100		68		68% Borderline	
4.0 Building Safety and Security		200		146		73% Satisfactory	
5.0 Educational Adequacy		200		132		66% Borderline	
6.0 Environment for Education		200		140		70% Satisfactory	
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Commentary		—		—		—	
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2.0 <u>Structural and Mechanical Features</u>	200	144	72%	Satisfactory	
3.0 <u>Plant Maintainability</u>	100	68	68%	Borderline	
4.0 <u>Building Safety and Security</u>	200	146	73%	Satisfactory	
5.0 <u>Educational Adequacy</u>	200	132	66%	Borderline	
6.0 <u>Environment for Education</u>	200	140	70%	Satisfactory	
<u>LEED Observations</u>	—	—	—	—	—
<u>Commentary</u>	—	—	—	—	—
Total	1000	705	71%	Satisfactory	

Enhanced Environmental Hazards Assessment Cost Estimates			
C=Under Contract			
Renovation Cost Factor			100.00%
Cost to Renovate (Cost Factor applied)			\$7,426,268.35
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>			

A. Heating System

Description: The existing system for the overall facility is a gas fired heating hot water system, installed in 1986, and is in fair condition. The heating and chilled water system in the overall facility is a 2-pipe system, without a capacity for simultaneous heating and cooling operation, which is not compliant with the OSDM requirements for basic system type. The 3 gas fired boilers, manufactured by Bryan and Thermal Solutions, were installed in 2008 and 2015 and are in fair-to-good condition. Heating water is distributed to terminal units consisting of unit ventilators, cabinet heaters, unit heaters, and air handlers. The terminal equipment was installed in 1986 and is in fair condition. The system does not comply with the 15 CFM per person fresh air requirements of the Ohio Building Code mechanical code and Ohio School Design Manual. The DDC type system temperature controls were installed in 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 in the Cafeteria, Gymnasium, Library, and Main Office, but the ductwork cannot be integrated into a possible future system due to arrangement, air volume, and routing of existing ductwork. The existing system is not ducted in the Classrooms, and floor to structural deck heights will not accommodate the installation of properly sized ductwork for a future Ohio School Design Manual approved system. The overall heating system is evaluated as being in safe but inefficient working order, and long term life expectancy of the existing system is not anticipated. The structure is equipped with central air conditioning. The site does not contain underground fuel tanks.

Rating: 3 Needs Replacement

Recommendations: Provide new overall heating, ventilating, and air conditioning system to achieve compliance with Ohio Building Code and Ohio School Design Manual standards. Convert to ducted system to facilitate efficient exchange of conditioned air. Provide architectural soffits to accommodate the installation of ductwork in the Classrooms.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
HVAC System Replacement:	\$26.12	sq.ft. (of entire building addition)		74,518 ft ² Required	\$1,946,410.16	(includes demo of existing system and reconfiguration of piping layout and new controls, air conditioning)
Convert To Ducted System	\$8.00	sq.ft. (of entire building addition)		Required	\$596,144.00	(includes costs for vert. & horz. chases, cut openings, soffits, etc. Must be used in addition to HVAC System Replacement if the existing HVAC system is non-ducted)
Sum:			\$2,542,554.16	\$2,542,554.16		



Gas Fired Boilers



Pumps

[Back to Assessment Summary](#)

B. Roofing

Description: The roof over the overall facility is an EPDM and asphalt shingle system that was installed in 2011, and is in good condition. The asphalt shingles are in fair condition and were not replaced during the 2011 installation of the EPDM. There are reports of current leaking in the gym and room 115. Signs of past leaking were observed during the physical assessment. Access to the roof was gained by an access door, access hatch, and access ladder, all which are in good to fair condition. Fall safety protection cages are not required and have not been provided. There were no observations of standing water on the roof. Metal cap flashing are in good condition. Roof storm drainage is addressed through a system of roof drains and gutters and downspouts, which are properly located, and in good condition. The roof is not equipped with overflow roof drains. No problems requiring attention were encountered with any roof penetrations. There are not any covered walkways attached to this structure.

Rating: 2 Needs Repair

Recommendations: Replace the asphalt shingles due to age and condition. Add overflow roof drains. Further investigation into roof leaking in the gymnasium and classroom 115 is required.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Asphalt Shingle:	\$3.00	sq.ft. (Qty)		12,000 Required	\$36,000.00	
Overflow Roof Drains and Piping:	\$2,500.00	each		26 Required	\$65,000.00	
Other: Roof Repair	\$10,000.00	allowance		Required	\$10,000.00	Allowance towards current roof leaks.
Sum:			\$111,000.00	\$111,000.00		



Asphalt Shingles



EPDM Roof

[Back to Assessment Summary](#)

C. Ventilation / Air Conditioning

Description: The overall facility is equipped with an air cooled chilled water type central air conditioning system, which is in good condition. An air cooled chiller produces chilled water and pumps distribute chilled water to terminal units. The equipment is in good condition. The ventilation system in the overall facility consists of unit ventilators, installed in 1986 and in fair condition, providing fresh air to Classrooms, and air handlers, installed in 1986 and in fair condition, providing fresh air to other miscellaneous spaces such as Gymnasiums, Student Dining, and Media Center. Relief air venting is provided by ceiling plenums. The ventilation system does not meet the Ohio Building Code 15 CFM per occupant fresh air requirement. The overall system is not compliant with Ohio Building Code and Ohio School Design Manual requirements. Dust collection systems are not required in this facility. The Art program is equipped with a kiln, and existing kiln ventilation is adequate, and in fair condition. General building exhaust systems for Restrooms are adequately placed, and in fair condition.

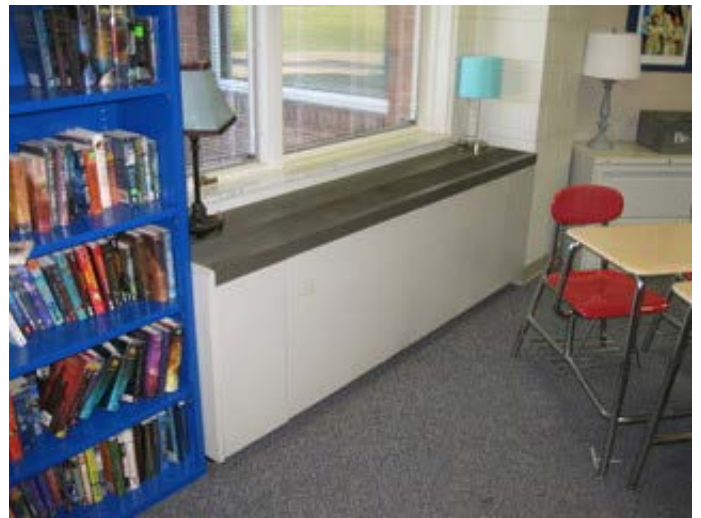
Rating: 3 Needs Replacement

Recommendations: Provide an air conditioning system to meet with Ohio Building Code and Ohio School Design Manual requirements. Replace general building exhaust systems located in Restrooms. Pricing included in Item A. Existing air cooled chiller to be reused.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Other: maintain chiller-	\$125,000.00	lump sum		Required	-\$125,000.00	The cost includes a deduction for the air-cooled chiller to be reused.
Sum:			-\$125,000.00	-\$125,000.00		



Air Cooled Chiller



Unit Ventilator

[Back to Assessment Summary](#)

D. Electrical Systems

Description: The electrical system provided to the overall facility is a 480/277-volt, 3-phase, 4-wire, 1,200-amp system, installed in 1986, and is in good 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 1986, is in good condition, and can be expanded to add additional capacity. The Classrooms are not equipped with adequate electrical outlets. The typical Classroom contains 10 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 16 general purpose outlets, while others are equipped with as few as 8 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 equipped with a suitable emergency generator. Adequate lightning protection safeguards are not provided. Stage lighting power system, including control panel, breakers, and dimmers is inadequately provided, in good condition, and does not meet OSDM requirements. The overall electrical system does not meet Ohio School Design Manual requirements in supporting the current needs of the school, and will be inadequate to meet the facility's future needs.

Rating: 2 Needs Repair

Recommendations: Provide additional panels, circuits and outlets, to increase capacity for Classrooms and Corridors. Provide control panel, dimmers, and breakers to support the Stage lighting system. Provide adequate lightning protection safeguards.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Panel Replacement:	\$3,500.00	unit		3 Required	\$10,500.00	(power or lighting sub-panel only)
Additional Circuits:	\$800.00	per circuit		30 Required	\$24,000.00	
Additional Receptacles	\$250.00	each		45 Required	\$11,250.00	
Lightning Protection	\$0.30	sq.ft. (of entire building addition)		Required	\$22,355.40	
Grounding	\$0.25	sq.ft. (of entire building addition)		Required	\$18,629.50	
Sum:			\$86,734.90	\$86,734.90		



Main Electrical Distribution Equipment



Electrical Distribution Panels

[Back to Assessment Summary](#)

E. Plumbing and Fixtures

Description:

The service entrance is not equipped with a reduced pressure backflow preventer. A water treatment system is not provided. The domestic water supply piping in the overall facility is copper, was installed in 1986, and is in good condition. The waste piping in the overall facility is cast iron and PVC, was installed in 1986, and is in good condition. The facility is equipped with 1 gas water heater in poor condition, with 2 separate 300-gallon storage tanks in poor condition. The school contains 2 Large Group Restrooms for boys, 2 Large Group Restrooms for girls, 1 Locker Room Restrooms for boys, 1 Locker Room Restrooms for girls, 0 Restrooms associated with specialty Classrooms, and 7 Restrooms for staff. Boys' Large Group Restrooms contain 0 ADA and 4 non-ADA wall mounted flush valve toilets, 0 ADA and 7 non-ADA wall mounted flush valve urinals, as well as 0 ADA and 6 non-ADA wall mounted lavatories. Girls' Large Group Restrooms contain 0 ADA and 9 non-ADA wall mounted flush valve toilets, as well as 0 ADA and 6 non-ADA wall mounted lavatories. Boys' Locker Room Restrooms contain 0 ADA and 2 non-ADA wall mounted flush valve toilets, 0 ADA and 2 non-ADA wall mounted flush valve urinals, 0 ADA and 2 non-ADA wall mounted lavatories, as well as 0 ADA and 6 unused, non-ADA showers. Girls' Locker Room Restrooms contain 0 ADA and 3 non-ADA wall mounted flush valve toilets, as well as 0 ADA and 2 non-ADA wall mounted lavatories, as well as 0 ADA and 6 unused, non-ADA showers. Staff Restrooms contain 0 ADA and 7 non-ADA wall mounted flush valve toilets, 0 ADA and 0 non-ADA urinals, as well as 0 ADA and 7 non-ADA wall mounted lavatories. Condition of fixtures is good. The facility is equipped with 0 ADA and 2 non-ADA drinking fountains, as well as 6 ADA and 0 non-ADA electric water coolers, in fair condition. Middle School Special Education Classrooms are not equipped with ADA or non-ADA sink mounted type drinking fountains. Special Education Classroom is not equipped with the required Restroom facilities. Kitchen is equipped with the required Restroom, and fixtures are in fair condition. Health Clinic is equipped with the required Restroom, and fixtures are in fair condition. Due to existing grade configuration, Kindergarten / Pre-K Classroom Restroom considerations are not relevant. 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 53 toilets, 13 urinals, 41 lavatories, 1 Classroom sink mounted drinking fountains, and 21 electric water coolers. Observations revealed that the school is currently equipped with 26 toilets, 9 urinals, 24 lavatories, 0 Classroom sink mounted drinking fountains, and 8 electric water coolers. ADA requirements are not met for fixtures and drinking fountains (see Item O). Custodial Closets are properly located and are adequately provided with required service sinks or floor drain sink, which are in fair condition. Kitchen fixtures consist of 1 hand sink, 1 single-compartment 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. Science Classrooms are equipped with required utility sink, gas / compressed air connections, and safety shower / eyewash in good condition. Due to existing grade configuration, no Biology or Chemistry Classroom acid waste systems are required. Adequate exterior wall hydrants are provided.

Rating:

3 Needs Replacement

Recommendations:

To facilitate the school's compliance with OBC and OSFC fixture requirements, provide 27 new toilets / 17 new lavatories / 4 new urinals / 13 new electric water coolers / 1 new lavatory mounted type drinking fountains. To reach a minimum requirement for LEED with low flow type fixtures, the 59 current toilet and urinal valves and current lavatory fixtures would need to be replaced (Replacement fixtures included in cost table). See Item O for replacement of fixtures related to ADA requirements. Provide reduced pressure backflow preventer. Replace the domestic hot water heater.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft ²		
Back Flow Preventer:	\$5,000.00	unit		1 Required	\$5,000.00	
Domestic Water Heater:	\$5,100.00	per unit		1 Required	\$5,100.00	(remove / replace)
Toilet:	\$3,800.00	unit		27 Required	\$102,600.00	(new)
Urinal:	\$3,800.00	unit		4 Required	\$15,200.00	(new)
Sink:	\$2,500.00	unit		17 Required	\$42,500.00	(new)
Electric water cooler:	\$3,000.00	unit		13 Required	\$39,000.00	(double ADA)
Replace faucets and flush valves	\$500.00	per unit		59 Required	\$29,500.00	(average cost to remove/replace)
Sum:			\$238,900.00	\$238,900.00		



Non-ADA Clinic Restroom



Typical Boys Restroom - Non-ADA

F. Windows

Description: The overall facility is equipped with thermally broken aluminum frame windows with double glazed type window systems, which were installed in 1986, and is in fair to poor condition. The window system features operable windows throughout the building, operable windows are equipped with opening limiters in fair condition. Window system seals are in poor condition, with no air and water infiltration being experienced. Window system hardware is in fair condition. The windows system features windows with integral blinds, which are in fair condition. This facility is equipped with curtain wall systems, which is in good condition. The facility does not contain glass block windows. The exterior doors in the overall facility are equipped with thermally broken sidelights and transoms with tempered glass in good condition. Exterior door vision panels are tempered. The building does not contain any skylight. The school does not contain any clerestories. Interior glass is OSDM compliant and in good condition. Window security grilles are not provided for ground floor windows. There is not a greenhouse associated with this school.

Rating: 3 Needs Replacement

Recommendations: Replace all existing windows with new insulated window systems with integral blinds that meet OSDM requirements.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Insulated Glass/Panels:	\$60.00	sq. ft. (Qty)		1,000 Required	\$60,000.00	(includes blinds)
Sum:			\$60,000.00	\$60,000.00		



Typical window



Poor window seal condition

[Back to Assessment Summary](#)

G. Structure: Foundation

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

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Sum:			\$0.00	\$0.00		



No foundation issues



No foundation issues

[Back to Assessment Summary](#)

H. Structure: Walls and Chimneys

Description: The overall facility has a brick veneer on load bearing masonry wall systems, which display no locations of deterioration, and is in good condition. The exterior masonry appears to have appropriately spaced and adequately caulked control joints, which are in poor condition. Control joints are provided at all lintel locations, doors and windows, building corners, and wall offsets. The school does have expansion joints, and they are in fair to poor condition. Exterior walls in the overall facility are adequately insulated. Brick veneer masonry walls are cavity walls. Weep holes are provided in sufficient quantity at 24"-48", at lintels and below sills, and are in fair condition. Weep holes are not rope type weeps. The exterior masonry has not been cleaned or sealed in recent years and has locations of efflorescence. Interior corridors and demising walls are CMU, project full height from floor to bottom of deck, and are in good condition. Interior masonry appears to have adequately spaced control joints. The control joints are in good condition. Window sills are brick, and are in good condition. The exterior lintels are steel, there are a few that are sagging and rusting, are in good to fair condition. There are no chimneys. Exterior soffits are steel type construction, and in good to fair condition. There are no canopies over entrances. The school is not equipped with a loading dock.

Rating: 3 Needs Replacement

Recommendations: Provided masonry cleaning, sealing, caulking as required through the overall facility. Recaulk existing control joints and expansion joints. Replace, prep, and paint exposed steel lintels that are sagging and rusting.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Exterior Masonry Cleaning:	\$1.50	sq.ft. (Qty)		40,000 Required	\$60,000.00	(wall surface)
Exterior Masonry Sealing:	\$1.00	sq.ft. (Qty)		40,000 Required	\$40,000.00	(wall surface)
Exterior Caulking:	\$5.50	ln.ft.		500 Required	\$2,750.00	(removing and replacing)
Lintel Replacement:	\$250.00	ln.ft.		25 Required	\$6,250.00	(total removal and replacement including pinning and shoring)
Sum:			\$109,000.00	\$109,000.00		



Sagging steel lintel



Exterior caulking in poor condition

[Back to Assessment Summary](#)

I. Structure: Floors and Roofs

Description: The floor construction of the base floor of the overall facility is slab on grab type construction, and is in good condition. There are no crawl spaces. The floor construction of the intermediate mezzanine floor is metal form deck on steel joist type construction, and is in good condition. Ceiling to structural deck spaces are sufficient to accommodate HVAC, electrical, and plumbing scope of work in required renovations. The roof construction of the overall facility metal form deck on steel joist type construction, and is in good condition.

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Sum:			\$0.00	\$0.00		



Roof Structure



Roof Structure

[Back to Assessment Summary](#)

J. General Finishes

Description:

The overall facility features conventionally partitioned, operable partitioned, and metal demountable partitioned Classrooms with either VCT in good condition, or broadloom carpet type flooring in poor condition, 2x4 ACT type ceilings in fair condition, as well as metal and CMU type wall finishes, and they are in good condition. The overall facility has Corridors with rubber type flooring in good condition, 2x4 ACT type ceilings in fair condition, as well as painted CMU and metal type wall finishes, and they are in good condition. The overall facility has Restrooms with epoxy non-slip 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 good condition. Classroom casework in the overall facility is wood type construction with plastic laminate tops, is adequately provided, and in good condition. Lab casework in the overall facility is of wood type construction with solid surface tops and is in fair to poor condition. The typical Classroom contains 0 lineal feet of casework, and the typical lab contains 84 lineal feet of casework with sections spanning from 18 to 30 feet. Classrooms are provided adequate chalkboards, markerboards, smartboards, and tackboards which are in good condition. The lockers, located in the Corridors, are adequately provided, and in good condition. The Art program is equipped with a kiln in good condition. The facility is equipped with wood non-louvered interior doors that are both flush mounted and recessed, with proper ADA hardware and clearances, and in good condition. The Gymnasium space has athletic wood type flooring, open type ceilings, as well as painted CMU type wall finishes, and they are in good condition. Wood Gymnasium flooring has been well maintained, will accommodate multiple future sandings and refinishings, and is rated at an early stage of its product lifecycle. Gymnasium telescoping stands are plastic type construction, in good condition. Gymnasium basketball backboards are electrically operated type, and are in good condition. The Media Center has carpet tile type flooring, 2x4 ACT type ceilings, as well as painted CMU type wall finishes, and they are in good condition. Student Dining has sheet rubber type flooring, 2x4 ACT type ceilings, as well as painted CMU type wall finishes, and they are in good condition. Existing Gymnasium, Student Dining, Media Center, and Music spaces are adequately provided with appropriate sound attenuation acoustical surface treatments. The existing Kitchen is full service, is undersized based on current enrollment, and the existing Kitchen equipment, installed between 1986-2002, is in good to fair condition. The required 6" overhang on all three exposed sides of the cooking equipment is provided by the hood. Walk-in cooler and freezer are located within the kitchen and are in good condition.

Rating:

3 Needs Replacement

Recommendations:

Provide for the replacement of lab casework due to poor and worn condition. Provide for the replacement of all broadloom carpet due to poor and worn condition. Provide for the full replacement of acoustical ceiling tiles due to complete lighting system replacement outlined in Item K. Provide for the replacement of kitchen equipment due to age and condition.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Acoustic Ceiling:	\$2.90	sq.ft. (Qty)		74,518 Required	\$216,102.20	(partial finish - drop in/standard 2 x 4 ceiling tile per area)
Carpet:	\$3.50	sq.ft. (Qty)		12,375 Required	\$43,312.50	(partial finish - tear-out and replace per area)
Complete Replacement of Casework (only)	\$3.25	sq.ft. (of entire building addition)		Required	\$242,183.50	(middle school, per building square feet)
Total Kitchen Equipment Replacement:	\$190.00	sq.ft. (Qty)		1,887 Required	\$358,530.00	(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:			\$860,128.20	\$860,128.20		



Casework is in Poor Condition



Broadloom Carpeting is Worn in Traffic Path

[Back to Assessment Summary](#)

K. Interior Lighting

Description:

The typical Classrooms in the overall facility are equipped with T-8 lay-in 2x4 fluorescent fixtures with single level switching. Classroom fixtures are in good condition, providing an average illumination of 45 FC, which is less than 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 dual level switching. Corridor fixtures are in good condition, providing an average illumination of 6 FC, which is less than the 20 FC recommended by the OSDM. The Primary Gymnasium spaces are equipped with pendant T-8 2x4 type lighting, in good condition, providing an average illumination of 48 FC, which is less than the 50 MS 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 42 FC, which is less than the 50 FC recommended by the OSDM. The Student Dining spaces are equipped with lay-in 2x4 T-8 fluorescent fixture type lighting with multi-level switching. Student Dining fixtures are in good condition, providing an average illumination of 33 FC, which is less than the 50 FC recommended by the OSDM. The Kitchen spaces are equipped with 1x4 surface mount T-8 fluorescent fixture type lighting with single level switching. Kitchen fixtures are in good condition, providing an average illumination of 44 FC, which is less than the 75-80 FC recommended by the OSDM. The Service Areas in the overall facility are equipped with 1x4 suspended T-8 fluorescent fixture type lighting in good condition. The typical Administrative spaces in the overall facility are equipped with lay-in 2x4 T-8 fluorescent fixture type lighting in good condition, providing adequate illumination based on OSDM requirements. The overall lighting systems of the facility are not 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 and lack of multi-level switching.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Complete Building Lighting Replacement	\$5.00	sq.ft. (of entire building addition)		Required	\$372,590.00	Includes demo of existing fixtures
Sum:			\$372,590.00	\$372,590.00		



Corridor Lighting



Media Center Lighting

[Back to Assessment Summary](#)

L. Security Systems

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

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Security System:	\$1.85	sq.ft. (of entire building addition)		Required	\$137,858.30	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	\$74,518.00	(complete, area of building)
Sum:			\$212,376.30	\$212,376.30		



Exterior Parking Lot Pole Fixture



Security System Keypad and Fire Alarm Pull Station

[Back to Assessment Summary](#)

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 not equipped with emergency egress floodlighting, but is equipped with recessed fluorescent lighting used as emergency egress lighting, and the system is in good condition. The system is provided with power via an emergency generator, and on separate circuits. 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.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Emergency/Egress Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	\$74,518.00	(complete, area of building)
Sum:			\$74,518.00	\$74,518.00		



Exit Sign



Exit Sign in Gym

[Back to Assessment Summary](#)

N. Fire Alarm

Description: The overall facility is equipped with a Simplex type fire alarm system, installed in 1986, and 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, strobe indicating devices, flow switches, tamper switches, smoke detectors, and heat sensors. The system thus supports existing 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 complete replacement of the fire alarm system to meet OBC, NFPA, and Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Fire Alarm System:	\$1.50	sq.ft. (of entire building addition)		Required	\$111,777.00	(complete new system, including removal of existing)
Sum:			\$111,777.00	\$111,777.00		



Fire Alarm Control Panel and Central Time Panel



Fire Alarm Horn/Strobe

[Back to Assessment Summary](#)

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 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 ADA accessible. Access from the parking / drop-off area to the building entries is not compromised by steps or steep ramps. Adequate handicap parking is provided. Exterior doors are equipped with ADA hardware. Building entrances should be equipped with one power assist doors, and one is provided, which is in good condition. No playground issues were considered due to the current grade configuration. On the interior of the building, space allowances and reach ranges are 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 recessed, are provided adequate clearances, and are provided with ADA-compliant hardware. 9 ADA-compliant toilets are required, and 0 are currently provided. 9 ADA-compliant Restroom lavatories are required, and 0 are currently provided. 4 ADA-compliant Science Classroom lab sinks are required, and 0 are currently provided. 3 ADA-compliant urinals are required, and 0 are currently provided. 2 ADA-compliant showers are required, and 0 are currently provided - showers are currently used as storage areas. 9 ADA-compliant electric water coolers are required, and 6 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. Science Classrooms are not compliant with ADA requirements due to clearances, fixture and spatial requirement. Health Clinic and Special Education Restrooms are not compliant with ADA requirements (due to clearances and fixture and accessory requirements. ADA signage is not provided on both the interior and the exterior of the building. Note: existing ADA type sinks are not provided with adequate pipe covers.

Rating: 3 Needs Replacement

Recommendations: Provide ADA-compliant signage, electric water coolers, toilets, sinks, urinals, toilet partitions, toilet accessories in the overall facility to facilitate the school's meeting of ADA requirements. Provide minimum required ADA shower per OSDM Guidelines: one for the Special Education space and one each for the locker rooms. Remount mirrors in the 9 restroom to comply with ADA standards. Retrofit 4 science labs each with one ADA compliant sink station.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
Signage:	\$0.20	sq.ft. (of entire building addition)		74,518 ft²	Required	\$14,903.60(per building area)
Electric Water Coolers:	\$3,000.00	unit		3 Required		\$9,000.00(new double ADA)
Toilet/Urinals/Sinks:	\$3,800.00	unit		9 Required		\$34,200.00(new ADA)
Toilet Partitions:	\$1,000.00	stall		9 Required		\$9,000.00(ADA - grab bars, accessories included)
Remount Restroom Mirrors to Handicapped Height:	\$285.00	per restroom		9 Required		\$2,565.00
Provide ADA Shower:	\$3,000.00	each		3 Required		\$9,000.00(includes fixtures, walls, floor drain, and supply line of an existing locker room)
Provide Toilet Accessories:	\$1,000.00	per restroom		9 Required		\$9,000.00
Other: Science ADA Lab Sink	\$1,500.00	per unit		4 Required		\$6,000.00Retrofit existing station with ADA compliant sink station (casework included in Item J)
Sum:			\$93,668.60	\$93,668.60		



Non-ADA Science Classroom Fixtures



Non-ADA Staff Water Cooler

[Back to Assessment Summary](#)

P. Site Condition

Description: The 20.45 acre relatively flat site is located in an suburban residential setting with moderate trees and shrub type landscaping. There are no outbuildings. There are no apparent problems with erosion or ponding. The site is bordered by a moderately 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 curbside bus loading and unloading zone in front of the school, which is not separated from other vehicular traffic. Staff and visitor parking is facilitated by a asphalt parking lot in good condition, containing 109 parking places, which provides adequate parking for the staff members, visitors, and disabled. The site and parking lot drainage design, consisting of storm sewers provides adequate evacuation of storm water, and no problems with parking lot ponding were observed. The site features no concrete curbing. Concrete sidewalks are properly sloped, are located to provide a logical flow of pedestrian traffic, and are in good condition. Trash pick-up and service drive pavement is heavy duty and is in good condition, and is equipped with a concrete pad area for dumpsters, which is in good condition. Due to existing grade configuration, no playground considerations are relevant. There are no athletic facilities on this site. Site features are suitable for outdoor instruction.

Rating: 2 Needs Repair

Recommendations: Provide Bus Drop-off loop.

Item	Cost	Unit	Whole Building	Original Building (1986) 74,518 ft²	Sum	Comments
Bus Drop-Off for Middle	\$110.00	per student		600 Required	\$66,000.00	(Number of students should be rounded <u>up</u> to the nearest 100. \$5500 per bus; 40 students per bus; 80% of middle school students riding)
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	\$111,777.00	Include this one <u>or</u> the next. (Each addition should have this item)
Sum:			\$227,777.00	\$227,777.00		



Site



Site

[Back to Assessment Summary](#)

Q. Sewage System

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

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft ²		
Sum:			\$0.00	\$0.00		



Kitchen Sink Waste



Grease Interceptor

[Back to Assessment Summary](#)

R. Water Supply

Description: The domestic water supply system is tied in to the city system, features 3" service, 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 equipped with an automated fire suppression system, for which the existing water supply provides adequate support. 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: Existing conditions require no renovation or replacement at the present time.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Sum:			\$0.00	\$0.00		



Water Main



Sprinkler Riser

[Back to Assessment Summary](#)

S. Exterior Doors

Description: Typical exterior doors in the overall facility are hollow metal type construction, installed on hollow metal frames, and in good condition. Typical exterior doors do not contain vision panels, and do contain appropriate hardware. Entrance doors in the overall facility are aluminum type construction, installed on aluminum frames, and in good condition. Entrance doors feature single glazed tempered glass vision panel, and appropriate hardware. The facility is equipped with one roof access door, which is in good to fair condition. Overhead doors are steel and in good condition.

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Sum:			\$0.00	\$0.00		



Main Entrance



Typical exterior door

[Back to Assessment Summary](#)

T. Hazardous Material

Description: The School District provided the AHERA Three Year Reinspection reports, prepared by Gandee & Associates, Inc. and dated May 2014, documenting known and assumed locations of asbestos and other hazardous materials. The AHERA Reports referenced only assumed asbestos containing materials, and failed to document quantities and locations. An Enhanced Environmental Hazards Assessment (EEHA) will need to be conducted in order to establish abatement budgets. Cement board containing hazardous materials are located in the Original Construction in fair condition. These materials were described in the report to be in non-friable condition with no damage. Due to the construction date, there is no 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 AHERA Three Year Reinspection report. Provide for disposal of fluorescent lighting.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
<i>Environmental Hazards Form</i>				EHA Form	—	
Fluorescent Lamps & Ballasts Recycling/Incineration	\$0.10	sq.ft. (Qty)		74,518 Required	\$7,451.80	
Cement Board Removal	\$5.00	sq.ft. (Qty)		100 Required	\$500.00	
Sum:			\$7,951.80	\$7,951.80		



Assumed Location of Hazardous Fume Hood Material

[Back to Assessment Summary](#)

U. Life Safety

Description:

The overall facility is equipped with a compliant automated fire suppression system. Exit Corridors are situated such that dead-end Corridors are not present. Stair towers are not present in this single story structure. The facility does not have any exterior stairways from intermediate floors. Guardrails meet the 4" ball test and do not extend past the top and bottom stair risers as required by the Ohio Building Code. Fire extinguishers are provided in sufficient quantity. Existing fire extinguishers are adequately spaced. Rooms with a capacity greater than 50 occupants are equipped with adequate egress. 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. The facility is equipped with an emergency generator. The emergency generator is a natural gas fired type unit, and is located outside the building. The emergency generator is in fair condition, and does not provide adequate capacity for the future needs of the school. The existing water supply is provided by a tie-in to the city system, and is sufficient to meet the future fire suppression needs of the school.

Rating:

2 Needs Repair

Recommendations:

Provide new handrails to meet the requirements of the Ohio Building Code. Provide new emergency generator.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
Generator:	\$50,000.00	unit		1 Required	\$50,000.00	(75 KW w/fence and pad/day tank only, life safety only)
Handrails:	\$5,000.00	level		1 Required	\$5,000.00	
Sum:			\$55,000.00	\$55,000.00		



Need Handrails at Cafeteria Steps



Kitchen Hood

[Back to Assessment Summary](#)

V. Loose Furnishings

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

Rating: 2 Needs Repair

Recommendations: Provide for replacement of outdated or inadequate furnishings.

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
CEFPI Rating 6	\$3.00	sq.ft. (of entire building addition)		74,518 ft²		
Sum:			\$223,554.00	Required	\$223,554.00	



Mismatched Furnishings



Furniture is Inconsistent in Design

[Back to Assessment Summary](#)

W. Technology

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

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Original Building (1986)	Sum	Comments
				74,518 ft²		
MS portion of building with total SF 67,951 to 91,650	\$9.47	sq.ft. (Qty)		74,518 Required	\$705,685.46	
Sum:			\$705,685.46	\$705,685.46		



Media Center Computers



Classroom Television

[Back to Assessment Summary](#)

X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		\$5,968,215.42
7.00%	Construction Contingency	\$417,775.08
Subtotal		\$6,385,990.50
16.29%	Non-Construction Costs	\$1,040,277.85
Total Project		\$7,426,268.35

Construction Contingency	\$417,775.08
Non-Construction Costs	\$1,040,277.85
Total for X.	\$1,458,052.93

Non-Construction Costs Breakdown		
Land Survey	0.03%	\$1,915.80
Soil Borings / Phase I Envir. Report	0.10%	\$6,385.99
Agency Approval Fees (Bldg. Code)	0.25%	\$15,964.98
Construction Testing	0.40%	\$25,543.96
Printing - Bid Documents	0.15%	\$9,578.99
Advertising for Bids	0.02%	\$1,277.20
Builder's Risk Insurance	0.12%	\$7,663.19
Design Professional's Compensation	7.50%	\$478,949.29
CM Compensation	6.00%	\$383,159.43
Commissioning	0.60%	\$38,315.94
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$71,523.09
Total Non-Construction Costs	16.29%	\$1,040,277.85

[Back to Assessment Summary](#)

Name of Appraiser	Holly Grambort	Date of Appraisal	2015-09-23
Building Name	McCord Middle School		
Street Address	1500 Hard Rd		
City/Town, State, Zip Code	Columbus, OH 43235		
Telephone Number(s)	614-450-4000		
School District	Worthington City		

Setting: Suburban

Site-Acreage	20.45	Building Square Footage	74,518
Grades Housed	7-8	Student Capacity	606
Number of Teaching Stations	17	Number of Floors	1
Student Enrollment	503		
Dates of Construction	1986		

Energy Sources:	<input type="checkbox"/> Fuel Oil	<input checked="" type="checkbox"/> Gas	<input checked="" type="checkbox"/> Electric	<input type="checkbox"/> Solar
Air Conditioning:	<input type="checkbox"/> Roof Top	<input type="checkbox"/> Windows Units	<input checked="" type="checkbox"/> Central	<input type="checkbox"/> Room Units
Heating:	<input checked="" type="checkbox"/> Central	<input type="checkbox"/> Roof Top	<input type="checkbox"/> Individual Unit	<input type="checkbox"/> Forced Air
	<input checked="" type="checkbox"/> Hot Water	<input type="checkbox"/> 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

[Back to Assessment Summary](#)

1.0 The School Site

School Facility Appraisal

			Points Allocated	Points
1.1		Site is large enough to meet educational needs as defined by state and local requirements <i>The site is 20.45 acres compared to 24 acres required by the OSDM.</i>	25	14
1.2		Site is easily accessible and conveniently located for the present and future population <i>The School is centrally located within the district that it serves, and is easily accessible.</i>	20	20
1.3		Location is removed from undesirable business, industry, traffic, and natural hazards <i>The site is adjacent to residential uses, which are suitable for educational instruction.</i>	10	8
1.4		Site is well landscaped and developed to meet educational needs <i>The site is moderately landscaped with mature shade trees, ornamental trees, and shrubs which define the property and emphasize the building entrance. Lawn areas where mowing is required do not exceed 3:1 slope.</i>	10	8
1.5	ES	Well equipped playgrounds are separated from streets and parking areas	10	7
	MS	Well equipped athletic and intermural areas are separated from streets and parking		
	HS	Well equipped athletic areas are adequate with sufficient solid-surface parking <i>Hard surface play areas provide educational features painted on an asphalt surface, which is in good condition. A basketball court are provided on the hard surface, and are separated from vehicular use areas.</i>		
1.6		Topography is varied enough to provide desirable appearance and without steep inclines <i>The site is gently sloped to provide positive drainage across the site. A flat area is provided to accommodate buildings, perimeter walks, vehicular circulation, parking areas, outdoor play areas, and physical education spaces, and is desirable.</i>	5	5
1.7		Site has stable, well drained soil free of erosion <i>Soils appear to be stable and well drained, and no erosion was observed.</i>	5	5
1.8		Site is suitable for special instructional needs , e.g., outdoor learning <i>The site has not been developed to accommodate outdoor learning.</i>	5	0
1.9		Pedestrian services include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes <i>Sidewalks are adequately provided to accommodate safe pedestrian circulation including designated crosswalks, curb cuts, and correct slopes.</i>	5	4
1.10	ES/MS	Sufficient on-site, solid surface parking for faculty and staff is provided	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, and community parking, and is located on asphalt pavement in good condition.</i>		
TOTAL - The School Site			100	75

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 and signage.</i>	15	10
2.2	Roofs appear sound, have positive drainage, and are weather tight <i>The roofs over the entire facility are in good condition but require replacement in some areas due to age of system.</i>	15	12
2.3	Foundations are strong and stable with no observable cracks <i>Foundations are in good condition with no observable cracks.</i>	10	10
2.4	Exterior and interior walls have sufficient expansion joints and are free of deterioration <i>Exterior and interior walls are in good condition, have sufficient control joints, and are free from deterioration. Expansion joints are provided.</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	10
2.6	Building "envelope" generally provides for energy conservation (see criteria) <i>Building envelope meets minimum energy conservation 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	6
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	9
2.10	Internal water supply is adequate with sufficient pressure to meet health and safety requirements <i>The water pressure was measured at 65 PSI.</i>	15	14
2.11	Each teaching/learning area has adequate convenient wall outlets , phone and computer cabling for technology applications <i>There are an inadequate amount of wall outlets in teaching and learning areas.</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	2
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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 placed.

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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Dependable two way communication is acheived via the intercommunication system.

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

144

[Back to Assessment Summary](#)

3.0 Plant Maintainability

School Facility Appraisal

		Points Allocated	Points
3.1	Windows, doors, and walls are of material and finish requiring minimum maintenance <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, wood, which is well maintained throughout the facility. Carpet and carpet tile is in poor condition.</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. Glazed block is easily cleaned and resistant to stain. Plaster walls are not easily cleaned and resistant to stain. Drywall type wall finishes are not easily cleaned and resistant to stain.</i>	10	8
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 good condition.</i>	10	8
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	8
3.6	Restroom fixtures are wall mounted and of quality finish <i>Fixtures are wall mounted and are of good quality.</i>	10	8
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>There is an inadequate amount of receptacles throughout the building.</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	68

[Back to Assessment Summary](#)

4.0 Building Safety and Security

School Facility Appraisal

Site Safety		Points Allocated	Points
4.1	Student loading areas are segregated from other vehicular traffic and pedestrian walkways <i>Student loading is not separated from other vehicular traffic.</i>	15	10
4.2	Walkways , both on and offsite, are available for safety of pedestrians <i>Walkways are adequately provided both on and off-site for pedestrian safety.</i>	10	8
4.3	Access streets have sufficient signals and signs to permit safe entrance to and exit from school area <i>School signs and signals are 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 appears to be free from hazard, and is located on an hard surface material.</i>	5	3

Building Safety		Points Allocated	Points
4.6	The heating unit(s) is located away from student occupied areas <i>The building has unit ventilators in the classrooms.</i>	20	7
4.7	Multi-story buildings have at least two stairways for student egress <i>The building has 1 stairway, which is enclosed, and are not ADA and OBC compliant.</i>	15	9
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	9
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 adequately recessed with proper ADA clearances, and open outward.</i>	10	10
4.11	Building security systems are provided to assure uninterrupted operation of the educational program <i>Building security system is not equipped with cameras in areas with 6 or more computers, corridors or gathering areas.</i>	10	5

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	4
4.13	Stair risers (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16 <i>Stair risers do not exceed 7 inches permitted by the OBC.</i>	5	5
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 tempered 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 extend more than eight inches from the Corridor wall, which impede traffic flow in the Corridors.</i>	5	2
4.16	Traffic areas terminate at an exit or a stairway leading to an egress <i>There are no dead-end Corridors in the building.</i>	5	4

Emergency Safety		Points Allocated	Points
4.17	Adequate fire safety equipment is properly located <i>Fire extinguishers are adequately placed.</i>	15	14
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	13
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 CMU.</i>	15	13
4.20	Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided <i>An automatic fire alarm system is provided throughout.</i>	15	12
TOTAL - Building Safety and Security		200	146

[Back to Assessment Summary](#)

5.0 Educational Adequacy

School Facility Appraisal

Academic Learning Space		Points Allocated	Points
5.1	Size of academic learning areas meets desirable standards <i>The average Classroom is 800 SF compared to 900 SF required by the OSDM.</i>	25	17
5.2	Classroom space permits arrangements for small group activity <i>Undersized Classrooms do not allow sufficient space for effective small group activities.</i>	15	9
5.3	Location of academic learning areas is near related educational activities and away from disruptive noise <i>The Gymnasium and Music program are properly isolated from the academic learning areas to reduce distractions.</i>	10	8
5.4	Personal space in the classroom away from group instruction allows privacy time for individual students <i>Undersized Classrooms do not permit privacy time for individual students.</i>	10	8
5.5	Storage for student materials is adequate <i>Lockers, located in the Corridor, are adequately provided for student storage.</i>	10	8
5.6	Storage for teacher materials is adequate <i>Casework is not provided in classrooms for teacher storage. Dedicated storage rooms are not provided for each classroom cluster.</i>	10	5

Special Learning Space		Points Allocated	Points
5.7	Size of special learning area(s) meets standards <i>The Special Education Classroom is 151 SF compared to 900 SF recommended in the OSDM.</i>	15	3
5.8	Design of specialized learning area(s) is compatible with instructional need <i>Special Education spaces are not adequately provided to meet instructional needs.</i>	10	5
5.9	Library/Resource/Media Center provides appropriate and attractive space <i>The Media Center is 3,341 SF compared to 1800 SF recommended in the OSDM.</i>	10	9
5.10	Gymnasium (or covered P.E. area) adequately serves physical education instruction <i>The Gymnasium is 8,124 SF compared to 7,500 SF recommended in the OSDM. The Gymnasium space is adequately sized and equipped for physical education instruction.</i>	5	5
5.11	ES Pre-kindergarten and kindergarten space is appropriate for age of students and nature of instruction MS/HS Science program is provided sufficient space and equipment <i>Science Classrooms are appropriately sized and equipped for effective science instruction, yet casework will need full replacement.</i>	10	7

5.12	Music Program is provided adequate sound treated space <i>The Music Room is 1,971 SF compared to 1,800-3,000 recommended in the OSDM.</i>	5	5
5.13	Space for art is appropriate for special instruction, supplies, and equipment <i>The Art Room is 1,315 SF compared to 1,200 SF recommended in the OSDM.</i>	5	5

School Facility Appraisal

Points Allocated Points

5.14	Space for technology education permits use of state-of-the-art equipment <i>The facility is provided with Computer Labs for student use.</i>	5	4
5.15	Space for small groups and remedial instruction is provided adjacent to classrooms <i>No spaces have been provided adjacent to Classrooms for small groups or remedial instruction.</i>	5	2
5.16	Storage for student and teacher material is adequate <i>Lockers have been adequately provided for storage of student materials. Casework has not been adequately provided for storage of teacher materials.</i>	5	3

Support Space

Points Allocated Points

5.17	Teacher's lounge and work areas reflect teachers as professionals <i>The Teacher's Lounge does reflect a professional environment and includes adequate work space for preparation of teacher materials.</i>	10	9
5.18	Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation <i>The Student Dining space is 2,490 SF compared to 3,000 SF recommended in the OSDM. The Kitchen space is 1,887 SF compared to 3,030 SF recommended in the OSDM.</i>	10	5
5.19	Administrative offices provided are consistent in appearance and function with the maturity of the students served <i>Administrative Offices are adequately provided for Middle School students.</i>	5	4
5.20	Counselor's office insures privacy and sufficient storage <i>The space provided for the Counselor does ensure privacy, but lacks sufficient storage space.</i>	5	3
5.21	Clinic is near administrative offices and is equipped to meet requirements <i>The Clinic is 180 SF compared to 370 SF recommended in the OSDM.</i>	5	2
5.22	Suitable reception space is available for students, teachers, and visitors <i>There is a very small area for reception in the front office.</i>	5	3
5.23	Administrative personnel are provided sufficient work space and privacy <i>Administrative personnel are provided sufficient work space and privacy</i>	5	3

TOTAL - Educational Adequacy

200

132

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 typical of the 1980's, which is somewhat aesthetically pleasing.</i>	15	11
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	10
6.4	Entrances and walkways are sheltered from sun and inclement weather <i>The main entrance to the School partially sheltered.</i>	10	8
6.5	Building materials provide attractive color and texture <i>Exterior building materials consist of brick, stone, and concrete block, which do provide an attractive color and texture.</i>	5	3
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 a warm base with accent color of slightly more saturated hues. School colors are reflected in the athletic areas. The use of repeated colors and materials gives the building some unity and a sense of consistency.</i>	20	16
6.7	Year around comfortable temperature and humidity are provided throughout the building <i>The building has a central air conditioning system.</i>	15	13
6.8	Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement <i>It does not provide the minimum 15 CFM ventilation as required by the OBCMC.</i>	15	8
6.9	Lighting system provides proper intensity, diffusion, and distribution of illumination <i>Lighting is inadequate throughout the building.</i>	15	8
6.10	Drinking fountains and restroom facilities are conveniently located <i>Drinking fountains and Restroom facilities are conveniently located.</i>	15	9
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	8

6.12	Traffic flow is aided by appropriate foyers and corridors <i>Corridors and Foyers are adequately designed for efficient 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	8
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	140

[Back to Assessment Summary](#)

LEED Observation Notes

School District:	Worthington City
County:	Franklin
School District IRN:	45138
Building:	McCord Middle School
Building IRN:	95794

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)

McCord Middle School is located in a relatively urban setting central to the school district it serves. It provides transportation for 7th and 8th grade students living two miles from the school. LEED for Existing Buildings Operations and Maintenance for Schools may be considered. By implementing certain maintenance strategies, the school could qualify for the prerequisite and other credits in this category. Additional trees and landscaping and a white roof would likely be required to achieve the Heat Island Reduction credits. The 20.45 acre site is already smaller than required by OSDM standards so there is little room for added vegetation to protect and restore habitat. The light fixtures on site point downward so the Light Pollution Reduction credit should be attainable.

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)

The plumbing fixtures in most of the building would need to be replaced to meet the minimum requirements to achieve the water efficiency prerequisites. Adding meters to monitor indoor and outdoor water consumption will help the school achieve more credits.

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)

Depending on the age of the heating and cooling equipment, units may need to be replaced to achieve these credits. Metering and commissioning may need to be incorporated if it has not already. Changes in operations may also aid in obtaining these credits.

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)

LEED for Existing Buildings Operations and Maintenance for Schools prerequisites require the school to adapt an ongoing purchasing and waste policy, a facility maintenance, and renovation policy that the school can adapt if they haven't already. The credits in this category encourage future purchases of goods made with recycled content, low emissions, energy efficient, locally sourced, etc. If the school already participates in a recycling program, the waste policy may be just a matter of tracking it.

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)

The school features operable windows which will aid in obtaining the first of three prerequisites for Indoor Environmental Quality. The second prerequisite may be obtained by banning tobacco smoke on site by posting signs if they have not yet already. The third prerequisite would be to adapt a green cleaning policy if they have not yet already. Other credits in the category may be obtained by adding a lighting control system, adapting an indoor air quality management program, adapting green cleaning strategies, adapting a pest management plan, and conducting an occupant comfort survey.

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)

There are many ways to earn credits for innovation and design. Schools can likely earn credit by incorporating sustainability into the curriculum.

Justification for Allocation of Points

Building Name and Level: **McCord Middle School**

7-8

Building features that clearly exceed criteria:

1. Flexible partition walls have been provided between Classrooms and allow for a variety of class sizes.
2. The site is adjacent to residential uses, and there are no undesirable features adjacent to the school site.
- 3.
- 4.
- 5.
- 6.

Building features that are non-existent or very inadequate:

1. The site has not been developed to accommodate outdoor learning.
2. The site size does not meet requirements by OSDM.
3. Window design does not provide classrooms with a pleasant learning environment.
4. The site does not provide for adequate designated bus and vehicular loading/unloading zones.
- 5.
- 6.

[Back to Assessment Summary](#)

Environmental Hazards Assessment Cost Estimates

Owner:	Worthington City
Facility:	McCord Middle School
Date of Initial Assessment:	Sep 23, 2015
Date of Assessment Update:	Dec 23, 2015
Cost Set:	2015

District IRN:	45138
Building IRN:	95794
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
1986 Original Building	74,518	\$7,951.80	\$7,951.80
Total	74,518	\$7,951.80	\$7,951.80
Total with Regional Cost Factor (100.00%)	—	\$7,951.80	\$7,951.80
Regional Total with Soft Costs & Contingency	—	\$9,894.45	\$9,894.45

Environmental Hazards - Worthington City (45138) - McCord Middle School (95794) - Original Building

Owner: Worthington City

Bldg. IRN: 95794

Facility: McCord Middle School

BuildingAdd: Original Building

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	Assumed Asbestos-Containing Material	100	\$5.00	\$500.00
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			\$500.00
36. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demolition Work			\$500.00

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. 74518	74518	\$0.10	\$7,451.80	

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		\$7,951.80
2. A36, B1, D1, and E2	Total Cost for Env. Hazards Work - Demolition		\$7,951.80

* 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.

