Program Type	Assessment Only
Setting	Suburban
Assessment Name	Worthington Kilbourne High School
Assessment Date (on-site; non-EEA)	2015-09-28
Kitchen Type	Full Kitchen
Cost Set:	2015
Building Name	Worthington Kilbourne High
Building IRN	112094
Building Address	1499 Hard Road
Building City	Columbus
Building Zipcode	43235
Building Phone	(614)450-6400
Acreage	54.40
Current Grades:	9-12
Teaching Stations	85
Number of Floors	2
Student Capacity	1776
Current Enrollment	1113
Enrollment Date	2015-10-15

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

Number of Classrooms	77
Historical Register	**NO**
Building's Principal	Ms. Angie Adrean
Building Type	High

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North elevation photo:

East elevation photo:

South elevation photo:

West elevation photo:

GENERAL DESCRIPTION

282,036 Total Existing Square Footage
1990,1990,1998 Building Dates
9-12 Grades
1,113 Current Enrollment
85 Teaching Stations
54.40 Site Acreage

Worthington Kilborne High School, which is not on the National Register of Historic Buildings, and originally constructed in 1990, is a two story, 282,036 square foot brick and stone school building located in a suburban residential setting. The existing facility features a conventionally partitioned and demountable partitioned design, and does not utilize modular buildings. The structure of the 1990 Original Construction contains brick veneer and split-face block on load bearing masonry with steel framing type exterior wall construction, with load bearing masonry or demountable partition type wall construction in the interior. The base floor system consists of concrete slab on grade. The floor construction of the intermediate floors are metal form deck on steel joist type construction. The structure of the 1998 Addition contains brick veneer on load bearing masonry type exterior wall construction, with load bearing masonry type wall construction in the interior. The floor system consists of concrete slab on grade. The roof structure of the overall facility is metal form deck on steel joist or steel truss type construction. The roofing system of the overall facility is a combination of standing seam metal, membrane, and ballasted membrane type systems, installed in 1990. The ventilation system of the building is adequate to meet the needs of the users. Most of 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 Gymnasium and one Auxiliary Gymnasium with separate Student Dining. The electrical system for the facility is inadequate. The facility is not equipped with a fully compliant security system. The building is not equipped with a fully compliant automatic fire alarm system. The facility is equipped with a compliant automated fire suppression system. The building does not contain asbestos. The overall building is compliant with ADA accessibility requirements. The school is located on a 53.89 acre site adjacent to residential properties, other school district properties, as well as Interstate 270. The property 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. The 1990 Original Construction was renovated in 2009.

There is a large ravine that runs through the site, and is a main feature of the architectural and landscape design. The building is built on top of this ravine and stream, and an arched tunnel is provided under the building for the stream to flow through. The building features an open courtyard and covered patio for observation. Several walking trails are provided, as well as a bridge to cross the stream.

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Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition
Auditorium Fixed Seating Area	1990	yes	1	6,092	no
Original Construction	1990	yes	2	271,170	no
Weight Room Addition	1998	yes	1	4,774	no

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Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Auditorium Fixed Seating Area (1990)	6092													
Original Construction (1990)		41722		11430	12231	10662	11410	5221						22408
Weight Room Addition (1998)														
Total	6,092	41,722	0	11,430	12,231	10,662	11,410	5,221	0	0	0	0	0	22,408

Master Planning Considerations	There is a large ravine that runs through the site, and is a main feature of the architectural and landscape design. The building is built on top of this ravine and stream, and an arched tunnel is provided under the building for the stream to flow through. The building features an open courtyard and covered patio for observation. Several walking trails are provided, as well as a bridge to cross the stream. Interstate 270 borders the south side of the site.

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Existing CT Programs for Assessment

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Program Type	Program Name	Related Space	Square Feet
No Records Found			

Legend:

Not in current design manual

In current design manual but missing from assessment

Building Summary - Worthington Kilbourne High (112094)

District: Worthington City
Name: Worthington Kilbourne High
Address: 1499 Hard Road
Columbus,OH 43235
Bldg. IRN: 112094

County: Franklin **Area:** Central Ohio (0)
Contact: Ms. Angie Adrean
Phone: (614)450-6400
Date Prepared: 2015-09-28 **By:** Julie Apt
Date Revised: 2015-12-20 **By:** Julie Apt

Current Grades	9-12	Acreage:	54.40
Proposed Grades	N/A	Teaching Stations:	85
Current Enrollment	1113	Classrooms:	77
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Construction	1990	yes	2	271,170
Auditorium Fixed Seating Area	1990	yes	1	6,092
Weight Room Addition	1998	yes	1	4,774
Total				**282,036**

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

CEFPI Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	152	76%	Satisfactory
3.0 Plant Maintainability	100	82	82%	Satisfactory
4.0 Building Safety and Security	200	158	79%	Satisfactory
5.0 Educational Adequacy	200	167	84%	Satisfactory
6.0 Environment for Education	200	174	87%	Satisfactory
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	824	82%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	$35,099,780.69

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

	FACILITY ASSESSMENT Cost Set: 2015	Rating	Dollar Assessment	C
A.	Heating System	3	$9,623,068.32	-
B.	Roofing	3	$644,539.70	-
C.	Ventilation / Air Conditioning	2	$10,000.00	-
D.	Electrical Systems	3	$4,577,444.28	-
E.	Plumbing and Fixtures	3	$2,476,856.00	-
F.	Windows	3	$481,620.00	-
G.	Structure: Foundation	1	$0.00	-
H.	Structure: Walls and Chimneys	2	$133,745.00	-
I.	Structure: Floors and Roofs	1	$0.00	-
J.	General Finishes	3	$3,100,768.80	-
K.	Interior Lighting	3	$1,410,180.00	-
L.	Security Systems	3	$797,710.60	-
M.	Emergency/Egress Lighting	3	$282,036.00	-
N.	Fire Alarm	3	$423,054.00	-
O.	Handicapped Access	3	$262,742.20	-
P.	Site Condition	2	$1,749,573.00	-
Q.	Sewage System	1	$0.00	-
R.	Water Supply	1	$0.00	-
S.	Exterior Doors	1	$0.00	-
T.	Hazardous Material	1	$22,075.60	-
U.	Life Safety	3	$25,276.80	-
V.	Loose Furnishings	2	$551,888.00	-
W.	Technology	3	$1,635,808.80	-
X.	Construction Contingency / Non-Construction Cost	-	$6,891,393.59	-
Total			$35,099,780.69	

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Original Construction (1990) Summary

District: Worthington City
Name: Worthington Kilbourne High
Address: 1499 Hard Road
Columbus,OH 43235
Bldg. IRN: 112094

County: Franklin **Area:** Central Ohio (0)
Contact: Ms. Angie Adrean
Phone: (614)450-6400
Date Prepared: 2015-09-28 **By:** Julie Apt
Date Revised: 2015-12-20 **By:** Julie Apt

Current Grades	9-12	Acreage:	54.40
Proposed Grades	N/A	Teaching Stations:	85
Current Enrollment	1113	Classrooms:	77
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Construction	**1990**	**yes**	**2**	**271,170**
Auditorium Fixed Seating Area	1990	yes	1	6,092
Weight Room Addition	1998	yes	1	4,774
Total				**282,036**

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

CEFPI Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	152	76%	Satisfactory
3.0 Plant Maintainability	100	82	82%	Satisfactory
4.0 Building Safety and Security	200	158	79%	Satisfactory
5.0 Educational Adequacy	200	167	84%	Satisfactory
6.0 Environment for Education	200	174	87%	Satisfactory
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	824	82%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	$33,963,614.84

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

	FACILITY ASSESSMENT Cost Set: 2015	Rating	Dollar Assessment	C
A.	Heating System	3	$9,252,320.40	-
B.	Roofing	3	$594,524.00	-
C.	Ventilation / Air Conditioning	2	$10,000.00	-
D.	Electrical Systems	3	$4,401,089.10	-
E.	Plumbing and Fixtures	3	$2,397,794.00	-
F.	Windows	3	$481,620.00	-
G.	Structure: Foundation	1	$0.00	-
H.	Structure: Walls and Chimneys	2	$128,505.00	-
I.	Structure: Floors and Roofs	1	$0.00	-
J.	General Finishes	3	$3,099,814.00	-
K.	Interior Lighting	3	$1,355,850.00	-
L.	Security Systems	3	$772,834.50	-
M.	Emergency/Egress Lighting	3	$271,170.00	-
N.	Fire Alarm	3	$406,755.00	-
O.	Handicapped Access	3	$260,419.00	-
P.	Site Condition	2	$1,715,778.30	-
Q.	Sewage System	1	$0.00	-
R.	Water Supply	1	$0.00	-
S.	Exterior Doors	1	$0.00	-
T.	Hazardous Material	1	$21,693.60	-
U.	Life Safety	3	$10,000.00	-
V.	Loose Furnishings	2	$542,340.00	-
W.	Technology	3	$1,572,786.00	-
X.	Construction Contingency / Non-Construction Cost	-	$6,668,321.94	-
Total			$33,963,614.84	

Auditorium Fixed Seating Area (1990) Summary

District: Worthington City
Name: Worthington Kilbourne High
Address: 1499 Hard Road
Columbus,OH 43235
Bldg. IRN: 112094

County: Franklin **Area:** Central Ohio (0)
Contact: Ms. Angie Adrean
Phone: (614)450-6400
Date Prepared: 2015-09-28 **By:** Julie Apt
Date Revised: 2015-12-20 **By:** Julie Apt

Current Grades	9-12	Acreage:	54.40
Proposed Grades	N/A	Teaching Stations:	85
Current Enrollment	1113	Classrooms:	77
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Construction	1990	yes	2	271,170
Auditorium Fixed Seating Area	**1990**	**yes**	**1**	**6,092**
Weight Room Addition	1998	yes	1	4,774
Total				**282,036**

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

		FACILITY ASSESSMENT Cost Set: 2015	Rating	Dollar Assessment	C
	A.	Heating System	3	$207,859.04	-
	B.	**Roofing**	**3**	**$0.00**	-
	C.	**Ventilation / Air Conditioning**	**2**	**$0.00**	-
	D.	Electrical Systems	3	$98,873.16	-
	E.	Plumbing and Fixtures	3	$42,644.00	-
	F.	**Windows**	**3**	**$0.00**	-
	G.	Structure: Foundation	1	$0.00	-
	H.	**Structure: Walls and Chimneys**	**2**	**$0.00**	-
	I.	Structure: Floors and Roofs	1	$0.00	-
	J.	**General Finishes**	**3**	**$0.00**	-
	K.	Interior Lighting	3	$30,460.00	-
	L.	Security Systems	3	$11,270.20	-
	M.	Emergency/Egress Lighting	3	$6,092.00	-
	N.	Fire Alarm	3	$9,138.00	-
	O.	Handicapped Access	3	$1,218.40	-
	P.	**Site Condition**	**2**	**$0.00**	-
	Q.	Sewage System	1	$0.00	-
	R.	Water Supply	1	$0.00	-
	S.	Exterior Doors	1	$0.00	-
	T.	Hazardous Material	1	$0.00	-
	U.	**Life Safety**	**3**	**$0.00**	-
	V.	**Loose Furnishings**	**2**	**$0.00**	-
	W.	Technology	3	$35,333.60	-
-	X.	Construction Contingency / Non-Construction Cost	-	$108,198.96	-
Total				$551,087.36	

CEFPI Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	152	76%	Satisfactory
3.0 Plant Maintainability	100	82	82%	Satisfactory
4.0 Building Safety and Security	200	158	79%	Satisfactory
5.0 Educational Adequacy	200	167	84%	Satisfactory
6.0 Environment for Education	200	174	87%	Satisfactory
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	824	82%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	$551,087.36

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

Weight Room Addition (1998) Summary

District: Worthington City
Name: Worthington Kilbourne High
Address: 1499 Hard Road
Columbus,OH 43235
Bldg. IRN: 112094

County: Franklin **Area:** Central Ohio (0)
Contact: Ms. Angie Adrean
Phone: (614)450-6400
Date Prepared: 2015-09-28 **By:** Julie Apt
Date Revised: 2015-12-20 **By:** Julie Apt

Current Grades	9-12	Acreage:	54.40
Proposed Grades	N/A	Teaching Stations:	85
Current Enrollment	1113	Classrooms:	77
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Construction	1990	yes	2	271,170
Auditorium Fixed Seating Area	1990	yes	1	6,092
Weight Room Addition	**1998**	**yes**	**1**	**4,774**
Total				**282,036**

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

		FACILITY ASSESSMENT Cost Set: 2015	Rating	Dollar Assessment	C
	A.	Heating System	3	$162,888.88	-
	B.	Roofing	3	$50,015.70	-
	C.	**Ventilation / Air Conditioning**	**2**	**$0.00**	-
	D.	Electrical Systems	3	$77,482.02	-
	E.	Plumbing and Fixtures	3	$36,418.00	-
	F.	**Windows**	**3**	**$0.00**	-
	G.	Structure: Foundation	1	$0.00	-
	H.	Structure: Walls and Chimneys	2	$5,240.00	-
	I.	Structure: Floors and Roofs	1	$0.00	-
	J.	General Finishes	3	$954.80	-
	K.	Interior Lighting	3	$23,870.00	-
	L.	Security Systems	3	$13,605.90	-
	M.	Emergency/Egress Lighting	3	$4,774.00	-
	N.	Fire Alarm	3	$7,161.00	-
	O.	Handicapped Access	3	$1,104.80	-
	P.	Site Condition	2	$33,794.70	-
	Q.	Sewage System	1	$0.00	-
	R.	Water Supply	1	$0.00	-
	S.	Exterior Doors	1	$0.00	-
	T.	Hazardous Material	1	$382.00	-
	U.	Life Safety	3	$15,276.80	-
	V.	Loose Furnishings	2	$9,548.00	-
	W.	Technology	3	$27,689.20	-
-	X.	Construction Contingency / Non-Construction Cost	-	$114,872.69	-
Total				$585,078.49	

CEFPI Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	91	91%	Excellent
2.0 Structural and Mechanical Features	200	152	76%	Satisfactory
3.0 Plant Maintainability	100	82	82%	Satisfactory
4.0 Building Safety and Security	200	158	79%	Satisfactory
5.0 Educational Adequacy	200	167	84%	Satisfactory
6.0 Environment for Education	200	174	87%	Satisfactory
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	824	82%	Satisfactory

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	$585,078.49

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

A. Heating System

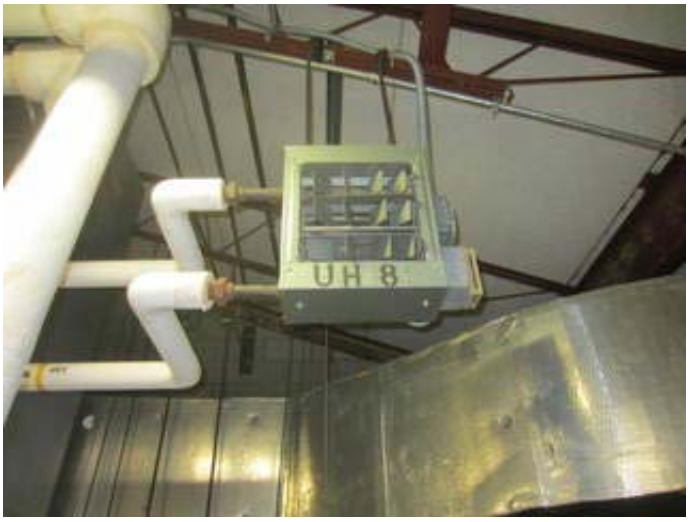
Description: The existing system for the 1990 Original Construction is a natural gas fired heated water boiler type system, installed in 1990, and is in fair condition. The system in the 1998 Addition is an extension of that found in the 1990 Original Construction. The heating and chilled water system in the overall facility is a 4-pipe system, with a capacity for simultaneous heating and cooling operation, which is compliant with the OSDM requirements for basic system type. The 1990 Original Construction is equipped with two (2) flexible water tube boilers, manufactured by Hartford Boilers, installed in 1990, and in fair condition. Heating water is distributed to terminal units throughout the overall facility consisting of unit heaters, cabinet heaters, and air handlers. The terminal equipment is original to each addition and is in fair condition. The system appears to comply with the 15 CFM per person fresh air requirements of the Ohio Building Code mechanical code and Ohio School Design Manual. The Automated Logic DDC type system temperature controls were installed in 2009, with upgrades in 2015, and are in good to 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 systems in the overall facility are ducted, but the ductwork cannot be integrated into a possible future system due to arrangement, air volume, and routing of existing ductwork. The overall heating system is evaluated as being in safe and efficient working order, though long term life expectancy of the existing system is not anticipated. The structure is equipped with central air conditioning. The site does not contain an underground fuel tank.

Rating: 3 Needs Replacement

Recommendations: Provide new overall heating, ventilating, and air conditioning system due to age and condition and to achieve compliance with Ohio Building Code and Ohio School Design Manual standards. Replace the ductwork in the overall facility to facilitate efficient exchange of conditioned air.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
HVAC System Replacement:	$26.12	sq.ft. (of entire building addition)		Required	Required	Required	$7,366,780.32	(includes demo of existing system and reconfiguration of piping layout and new controls, air conditioning)
Convert To Ducted System	$8.00	sq.ft. (of entire building addition)		Required	Required	Required	$2,256,288.00	(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:			$9,623,068.32	$207,859.04	$9,252,320.40	$162,888.88		

Natural Gas Fired Heated Water Boilers



Heating Water Unit Heater

Back to Assessment Summary

B. Roofing

Description: The roof over the overall facility is a combination of standing seam metal roof, membrane, and ballasted membrane systems that was installed in 1990, and is in fair condition. There are District reports of current leaking. Leaking is occurring at a section of ballasted membrane roof located near the main gymnasium. No signs of past leaking were observed during the physical assessment. Access to the roof was gained by access ladder and access door that are in good condition. Fall safety protection cages are not required. There were no observations of standing water on the roof. Metal cap flashings and stone copings are in good condition. Roof storm drainage is addressed through a system of gutters and downspouts, roof drains, and through-wall scuppers which are properly located, and in good condition. The roof is equipped with overflow roof drains in sufficient quantity and in good condition. No problems requiring attention were encountered with any roof penetrations. There are covered walkways that are integral to the structure and consist of open first floor areas with second floor occupied space above.

Rating: 3 Needs Replacement

Recommendations: Replace membrane roofing due to age and end of life cycle. Remove stone ballast. Funding for stone ballast removal is provided for in complete roof replacement cost. Use fully adhered membrane roofing system in replacement of ballasted roofing. Standing seam metal roofing does not require replacement. The flashing and / or coping at the 1990 Original Construction and the 1998 Addition require replacement due to condition and roof replacement. Funding for flashing and coping replacement is provided for in the complete replacement of roof. Provide new / additional roof insulation due to roof replacement.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Membrane (all types):	$8.70	sq.ft. (Qty)			49,960 Required	4,203 Required	$471,218.10	(unless under 10,000 sq.ft.)
Roof Insulation:	$3.20	sq.ft. (Qty)			49,960 Required	4,203 Required	$173,321.60	(non-tapered insulation for use in areas without drainage problems)
Sum:			$644,539.70	$0.00	$594,524.00	$50,015.70		

Ballasted Roof

Standing Seam and Membrane Roofing

Back to Assessment Summary

C. Ventilation / Air Conditioning

Description: The overall facility is equipped with a chilled water type central air conditioning system, which is in fair condition. The system consists of two (2) Trane roof top air cooled helical-rotary liquid chillers, in good to fair condition, and a packaged EnviroSep pump system, in good to fair condition, providing chilled water to terminal units consisting of air handlers. The overall facility is not equipped with any window units or isolated room systems. The ventilation system in the overall facility consists of air handlers, original to each addition and in fair condition, providing fresh air to Classrooms and other miscellaneous spaces such as Gymnasium, Student Dining, and Media Center. Relief air venting is provided by ceiling plenums, central relief fans, and air handlers. The ventilation system appears to meet the Ohio Building Code 15 CFM per occupant fresh air requirement. The overall system is not fully 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 two (2) kilns, and existing kiln ventilation systems are inadequate, and in fair condition. General building exhaust systems for Restrooms, Storage Rooms, Art Rooms, and Custodial Closets appear to be adequately placed, and in fair condition.

Rating: 2 Needs Repair

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

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Kiln Exhaust System:	$5,000.00	each			2 Required		$10,000.00	
Sum:			$10,000.00	$0.00	$10,000.00	$0.00		

Air Handling Unit

Air Cooled Helical-Rotary Liquid Chillers

Back to Assessment Summary

D. Electrical Systems

Description: The electrical system provided to the 1990 Original Construction is a 480/277 volts, 1,200 amp, 3 phase and 4 wire system installed in 1990, and is in fair condition. The system in the 1998 Addition is an extension of that found in the 1990 Original Construction. Power is provided to the school by a single utility owned, pad-mounted transformer located outside the Mechanical Room, and is in fair condition. The panel systems, original to each addition, are in fair condition, and for the most part can be expanded to add additional capacity. The Classrooms are not equipped with adequate electrical outlets. The typical Classroom contains four (4) general purpose outlets, one (1) dedicated outlet for each Classroom computer, and one (1) dedicated outlet for each Classroom television. Some Classrooms are equipped with as many as five (5) general purpose outlets, while others are equipped with as few as three (3) general purpose outlets. There are not any spaces that have no electrical outlets. The Corridors are equipped with adequate electrical outlets for servicing. GFI protected exterior outlets are adequately provided around the perimeter of the building. The facility is equipped with an unsuitable diesel emergency generator, in fair to poor condition. Adequate lightning protection safeguards do not appear to be provided. Stage lighting power system including control panel, breakers, and dimmers is inadequately provided, in fair condition and does not appear to meet OSDM requirements. The overall electrical system does not meet Ohio School Design Manual requirements in supporting the current needs of the school, and will be inadequate to meet the facility's future needs.

Rating: 3 Needs Replacement

Recommendations: The entire electrical system requires replacement to meet Ohio School Design Manual guidelines for overall capacity and due to condition and age and lack of OSDM-required features. Provide an emergency generator, with funding included in the electrical system replacement. Provide adequate lightning protection safeguards in the overall facility, including associated grounding system, with funding included in the electrical system replacement. Provide control panel, dimmers, and breakers to support the Stage lighting system.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
System Replacement:	$16.23	sq.ft. (of entire building addition)		Required	Required	Required	$4,577,444.28	(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:			$4,577,444.28	$98,873.16	$4,401,089.10	$77,482.02		

Main Electrical Distribution Panel

Pad Mounted Transformer

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E. Plumbing and Fixtures

Description: The service entrance is equipped with a reduced pressure back flow preventer in good condition. A water treatment system is not provided, though none is needed. The domestic water supply piping in the overall facility is copper and galvanized, is original to each addition, and is in good to fair condition. The waste piping in the overall facility is cast iron and PVC, is original to each addition, and is in good to fair condition. The facility is equipped with (1) 1250 gallon gas water heater, with an additional 119 gallon storage tank and (1) 125 gallon gas water heater, all fixtures are in good condition. In addition, the facility is equipped with (1) 100 gallon electric water heater, (1) 80 gallon electric water heater, (1) 30 gallon electric water heater, (1) 10 gallon electric water heater and (1) 5 gallon electric water heater, all fixtures are in good condition. The school contains 5 Large Group Restrooms for boys, 5 Large Group Restrooms for girls, 3 Locker Room Restrooms for boys, 3 Locker Room Restrooms for girls, 0 Restrooms associated with Specialty Classrooms, and 21 Restrooms for Staff. Boys' Large Group Restrooms contain 5 ADA and 11 non-ADA wall mounted flush valve toilets, 4 ADA and 12 non-ADA wall mounted flush valve urinals, as well as 4 ADA and 11 non-ADA countertop lavatories and 2 ADA and 0 non-ADA wall mounted lavatories. Girls' Large Group Restrooms contain 4 ADA and 24 non-ADA wall mounted flush valve toilets, as well as 5 ADA and 11 non-ADA countertop lavatories and 0 ADA and 1 non-ADA wall mounted lavatory. Boys' Locker Room Restrooms contain 0 ADA and 3 non-ADA wall mounted flush valve toilets, 0 ADA and 7 non-ADA wall mounted flush valve urinals, 0 ADA and 0 non-ADA wall mounted lavatories and 0 ADA and 6 non-ADA countertop lavatories, as well as 0 ADA and 18 non-ADA showers. Girls' Locker Room Restrooms contain 0 ADA and 6 non-ADA wall mounted flush valve toilets, as well as 1 ADA and 1 non-ADA wall mounted lavatories and 0 ADA and 5 non-ADA countertop lavatories, as well as 0 ADA and 13 non-ADA showers. Staff Restrooms contain 10 ADA and 3 non-ADA wall mounted flush valve toilets, 1 ADA and 0 non-ADA floor mounted flush valve toilets and 6 ADA and 8 non-ADA floor mounted tank type toilets, and 2 ADA and 0 non-ADA floor mounted flush valve urinals, as well as 12 ADA and 0 non-ADA wall mounted lavatories and 3 ADA and 8 non-ADA countertop lavatories. In addition, 8 non-ADA showers are associated with Staff Restrooms. Condition of fixtures is good. The facility is equipped with 0 ADA and 8 non-ADA drinking fountains, as well as 9 ADA and 9 non-ADA electric water coolers, all fixtures are in good condition. High School Special Education Classrooms are not equipped with sink mounted type drinking fountains. Access to an electric water cooler located within the Special Education wing is sufficient to meet the criteria. 5 of the 6 Special Education Classrooms are equipped with either a standard countertop sink or an ADA compliant wall mounted or countertop lavatory, which are in good condition. Special Needs/Education Classrooms are not equipped with the required Restroom facilities. Access to a Restroom located within the Special Needs/Education wing is sufficient to meet the criteria. Kitchen is equipped with the required Restroom and fixtures are in good condition. Health Clinic is equipped with the required Restroom, and fixtures are in good condition. Due to existing grade configuration, Kindergarten / Pre-K Classroom Restroom considerations are not relevant. Kitchen fixtures consist of 1 double compartment sink, 1 rinse sink with Power Soak, 1 single compartment soak sink, 1 double compartment rinse sink with disposal, 1 single compartment rinse sink with disposal, 3 ADA compliant wall mounted hand wash sinks, 1 commercial dishwasher/sanitizer, 2 countertop rinse sinks, 1 ice machine with point of use water conditioning system and 2 single compartment sinks (in Serving Area). All fixtures are in fair condition due to age. The Kitchen is equipped with a satisfactory grease interceptor/trap which is in good condition. The Kitchen is provided the required 140 degree hot water supply via an instantaneous heat booster, which is in good condition. The school meets the OBC requirements for fixtures, with the exception of the in Classroom sinks with deck mounted drinking fountains. 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 55 toilets, 20 urinals, 55 lavatories, 6 Classroom sink mounted drinking fountains, and 18 electric water coolers. Observations revealed that the school is currently equipped with 81 toilets, 25 urinals, 70 lavatories, 0 Classroom sink mounted drinking fountains, 8 drinking fountains and 18 electric water coolers. ADA requirements are not met for fixtures and drinking fountains (see Item O). Custodial Closets are properly located and are adequately provided with required service sinks or floor drain sinks, which are in good condition. Facility is equipped with 10 designated Science Classrooms and 5 Science Prep rooms. Only 1 Chemistry Classroom and 3 Science Prep Rooms are fully equipped with the required lab sink, gas/compressed air connections and safety shower/eyewash. The remaining Classrooms and Prep Rooms have only portions of the required fixtures. The fixtures that are present are in good condition. Biology and Chemistry Classrooms are equipped with a sump type acid waste system and neutralization tank, which is in good condition. The Art Rooms are equipped with 6 trough style sinks, which are in good condition. 2 Art Room sinks are not equipped with the required solids interceptors, while 4 Art Room sinks are equipped with required solids interceptors, which are in good condition. The Scene Shop is equipped with 3 utility style sinks and are not equipped with the required solids interceptors. Condition of fixtures is fair. Adequate exterior wall hydrants are provided.

Rating: 3 Needs Replacement

Recommendations: In the overall facility, replace the remaining galvanized steel domestic water piping and the remaining cast iron waste piping due to age and condition. To facilitate the school's compliance with OBC and OSFC fixture requirements throughout the overall facility: Due to age, condition, LEED, OBC, and OSFC, replace 200 faucets and valves throughout the overall facility. Due to age and condition, replace 3 utility sinks in Scene Shop. Provide a total of 5 solids interceptors on sinks, 2 for the Art Rooms and 3 on the replaced utility sinks in the Scene Shop. Provide emergency shower in Restroom located in the Special Needs/Education wing for full compliance of criteria. In Science Classrooms and Prep Rooms, provide 35 compressed air connections, 2 emergency shower/eyewash combinations, 1 single emergency shower, 6 Single 4 station lab/work stations (which include a lab sink with 2 faucet/gas/compressed air combinations), 10 ADA compliant lab/work stations (1 per Science Classroom), 1 single gas connection, 36 (2) faucet/gas/compressed air combination units and 1 Instructor demonstration/prep station with sink and faucet/gas/compressed air combination. All fixtures, whether new or replaced, to be mounted at ADA compliant heights. See Item O for replacement of fixtures related to ADA requirements as well as toilet rooms for 2 Staff Restrooms and 8 Coach's Restrooms. Funding for fixtures and equipment replacement in Kitchen is provided for in Item J.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Domestic Supply Piping:	$3.50	sq.ft. (of entire building addition)		Required	Required	Required	$987,126.00	(remove / replace)
Sanitary Waste Piping:	$3.50	sq.ft. (of entire building addition)		Required	Required	Required	$987,126.00	(remove / replace)
Replace faucets and flush valves	$500.00	per unit			194 Required	6 Required	$100,000.00	(average cost to remove/replace)
Other: ADA Compliant Lab Workstation	$10,519.00	per unit			10 Required		$105,190.00	One ADA compliant lab workstation. Includes workstation, 1 faucet/gas/compressed air combination unit, demolition, supply lines, drain pipes (blue lab grade PVC) and floor/wall repair.
Other: Compressed Air Connection	$800.00	each			35 Required		$28,000.00	Provide compressed air connections in Science Rooms.
Other: Emergency Safety Shower and Eyewash Station	$2,500.00	per unit			2 Required		$5,000.00	Provide new emergency safety shower and eyewash units.
Other: Four Station Student Lab Workstation	$10,519.00	per unit			6 Required		$63,114.00	One four station student lab workstation. Includes 2 lab faucet/gas/compressed air combination unit, demolition, supply lines, drain pipe (lab grade blue PVC) and floor repair.
Other: Instructor Demonstration Lab Station	$8,800.00	per unit			1 Required		$8,800.00	One instructor prep/demonstration workstation. Includes workstation/desk, 1 lab faucet/gas/compressed air combination unit, demolition, supply lines, drain pipe (blue lab grade PVC) and floor/wall repair.
Other: Lab Faucet with gas and compressed air connections	$4,700.00	per unit			36 Required		$169,200.00	Includes 2 faucet/gas/ compressed air combination unit, supply lines, drain pipes (blue lab grade PVC), demolition and floor/wall/workstation repair.
Other: Natural Gas Connection	$800.00	each			1 Required		$800.00	Natural gas connection only.
Other: New Emergency Shower	$2,500.00	each			2 Required		$5,000.00	Provide emergency shower. Includes fixture, supply lines, drain, demolition and floor/wall repair.
Other: Solids Interceptor	$2,000.00	each			2 Required		$4,000.00	Provide new solids interceptor in Art Rooms.
Other: Utility Sink with solids interceptor	$4,500.00	per unit			3 Required		$13,500.00	Includes fixture, trap, supply lines, faucet, demolition, floor/wall repair and solids interceptor.
Sum:			$2,476,856.00	$42,644.00	$2,397,794.00	$36,418.00		

Reduced Pressure Backflow Preventer

Large Group Restroom Girls 1990 Original Construction

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F. Windows

Description: The overall facility is equipped with thermally broken aluminum frame windows with single double glazed insulated glazing type window system, which was installed in 1990, and is in good condition. The window system features operable windows throughout most of the building, and operable windows are equipped with opening limiters in good condition and insect screens in good condition. Window system seals are in good condition, with no air and water infiltration being experienced. Window system hardware is in good condition. The window system features integral blinds, which are in good condition. This facility is not equipped with any curtain wall systems. There are glass block windows in the original construction, in good condition. The exterior doors in the overall facility are equipped with thermally broken aluminum frame sidelights and transoms with tempered double glazed insulated glazing, in good condition. Exterior door vision panels are double glazed insulated glazing. The school does contain 1 aluminum frame skylight in good condition. The school does not contain clerestories. Interior glass is OSDM-compliant. There is a 365 SF Greenhouse associated with this school, and it is in good condition.

Rating: 3 Needs Replacement

Recommendations: Existing windows are in good condition, however they require replacement due to age and end of life cycle. Provide for the replacement of existing windows system.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Insulated Glass/Panels:	$60.00	sq.ft. (Qty)			8,027 Required		$481,620.00	(includes blinds)
Sum:			$481,620.00	$0.00	$481,620.00	$0.00		

Aluminum Frame Windows

Glass Block

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G. Structure: Foundation

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

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00	$0.00		

Concrete Foundation

Concrete Foundation

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H. Structure: Walls and Chimneys

Description: The overall facility has a brick veneer and split-face block on a load bearing masonry wall system with steel framing, which displayed no locations of deterioration, and is in good condition. The exterior masonry appears to have appropriately spaced and adequately caulked control joints in good condition. Control joints are provided at lintel locations, at doors and windows, building corners, and wall offsets and are in good condition. The school does have sufficient expansion joints, and they are in good condition. Exterior walls in the overall facility are adequately insulated. Brick veneer masonry walls are cavity walls. Weep holes are provided in sufficient quantity, at 24''-48'' on center, at lintels, below sills, and the base of masonry cavity walls, and are in good condition. Weep holes are rope type weeps. Vents are provided in sufficient quantity at 24''-48'' on center. The exterior masonry has not yet needed to be cleaned and sealed, showing no evidence of mortar deterioration. Architectural exterior accent materials consist of split-faced block and stucco which is in good condition. Exterior building fenestration in the overall facility represents 15% of the exterior surfaces. Interior Corridor and demising walls are concrete masonry units and demountable partitions, the masonry walls 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 painted gypsum board type construction, and in good condition. The window sills are brick, and are in good condition. The exterior lintels are steel, and are in good condition. There are no chimneys. Canopies over entrances are elements of the roof construction, and are in good condition. Exterior soffits are of painted gypsum board type construction, and in good condition. The school is provided with an uncovered concrete conventional loading dock to facilitate the receipt of product, supplies, and foodstuffs, 445 square feet in size and featuring coiling type overhead doors. The dock itself is in good condition, and is equipped with bumper pads in good condition.

Rating: 2 Needs Repair

Recommendations: Remove and replace rope type weeps. Provide masonry cleaning and sealing as required through the overall facility.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Exterior Masonry Cleaning:	$1.50	sq.ft. (Qty)			50,988 Required	2,096 Required	$79,626.00	(wall surface)
Exterior Masonry Sealing:	$1.00	sq.ft. (Qty)			50,988 Required	2,096 Required	$53,084.00	(wall surface)
Other: Replace Rope Weeps w/Cell Vent	$2.50	each			414 Required		$1,035.00	Remove rope type weeps at windows and doors. Replace with plastic weep.
Sum:			$133,745.00	$0.00	$128,505.00	$5,240.00		

Brick Veneer and Control Joint

Rope Weep

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I. Structure: Floors and Roofs

Description: The floor construction of the base floor of the overall facility is cast-in-place concrete type construction, and is in good condition. There is no crawl space. The floor construction of the intermediate floors of the overall facility 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 scopes of work in required renovations. The roof construction of the overall facility metal form deck on steel joist or steel trusses type construction, and is in good condition.

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00	$0.00		

Steel Joist Structure

Steel Frame Structure

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J. General Finishes

Description: The 1990 Original Construction features conventionally partitioned and demountable partitioned Classrooms with linoleum tile, VCT, or carpet type flooring, acoustical tile type ceilings, as well as painted gypsum or demountable partition type wall finishes, and they are in good to fair condition. The overall facility has Corridors with VCT or linoleum type flooring, painted gypsum or acoustical tile type ceilings, as well as painted block or demountable partition type wall finishes, and they are in good to fair condition. The 1990 Original Construction has Restrooms with ceramic tile type flooring, painted gypsum type ceilings, as well as painted block type wall finishes, and they are in good to fair condition. Toilet partitions are plastic, and are in good condition. The 1998 Addition features a Weight Room with rubber tile type flooring, exposed type ceilings, as well as painted block type wall finishes, and they are in good to fair condition. There are two Restrooms in the 1998 Addition with ceramic tile type flooring, painted gypsum type ceilings, as well as painted block type walls, and they are in good to fair condition. Toilet partitions are plastic, and are in good condition. Classroom casework in the overall facility is wood type construction with plastic laminate or resin type tops, is inadequately provided, and in good to fair condition. The typical Classroom contains 0 lineal feet of casework, and Classroom casework provided ranges from 0 to 20 feet. Classrooms are provided adequate markerboards 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 two kilns in fair condition, and existing kiln ventilation is inadequate. The facility is equipped with wood non-louvered interior doors that are flush mounted or recessed with proper ADA hardware and clearances, and in fair condition. Interior door hardware was replaced throughout the overall facility within the last two years. The wood doors require sanding and refinishing. The Main Gymnasium space has wood type flooring, exposed type ceilings, as well as painted block 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 and concrete fixed stands are a plastic type construction in good condition. Six Gymnasium basketball backboards are an electrically operated type, and are in good condition. The Main Gymnasium is equipped with two electric scoreboards in good condition. The Auxiliary Gymnasium features a rubber type flooring, exposed type ceilings, as well as painted block type wall finishes, and they are in good condition. There are portable metal stands on wheels. 12 Gymnasium basketball backboards are electrically operated and eight are fixed, and they are in good to fair condition. The Auxiliary Gymnasium is equipped with three electric scoreboards in good condition. The Media Center, located in the 1990 Original Construction, has carpet type flooring, acoustical tile and painted gypsum type ceilings, as well as painted block, demountable partitions, and painted gypsum type wall finishes, and they are in good to fair condition. Student Dining, located in the 1990 Original Construction, has linoleum type flooring, acoustical tile and painted gypsum type ceilings, as well as painted block type wall finishes, and they are in good to fair condition. OSDM-required fixed equipment for Stage is adequately provided, and in good to fair condition. Existing Gymnasium, Student Dining, and Media Center spaces are inadequately provided with appropriate sound attenuation acoustical surface treatments. Existing Music spaces are adequately provided with appropriate sound attenuation acoustical surface treatments. The existing Kitchen is full service, is oversized based on current enrollment, and the existing Kitchen equipment, installed in 1990 is in fair condition. The Kitchen hood is in fair condition, and is equipped with the required UL 300 compliant wet chemical fire suppression system. The required 6'' overhang on all three exposed sides of the cooking equipment is provided by the hood. Kitchen hood exhaust ductwork is of proper construction, material, insulation, and installed as required by the OSDM and OBCMC. Reach-in cooler and freezer are located within the Kitchen spaces, and are in fair condition.

Rating: 3 Needs Replacement

Recommendations: Provide for sanding and refinishing of wood interior doors due to age and condition. Provide for the replacement of demountable partitions with new OSDM compliant partitions. Provide for the replacement of Kitchen equipment due to age. Provide for a new Kitchen Hood due to age. Provide for new walk-in cooler and freezer due to age. Funding for the walk-in cooler and freezer is provided for in the cost of the total Kitchen equipment replacement. Provide for the replacement of two Art Program kilns, with funding for kiln ventilation provided in Item C. Provide for appropriate acoustical sound attenuation surface treatments in the Gymnasiums, Media Center, and Student Dining. Provide for the replacement of Toilet Accessories. Provide for casework in the Classrooms. Provide for the replacement of the acoustic ceiling in the 1990 Original Construction due to installation of new HVAC and sprinkler systems. The Auditorium Fixed Seating Addition does not have ACT ceiling tiles and the Weight Room Addition has an exposed ceiling with no ACT ceiling tiles.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Acoustic Ceiling:	$2.90	sq.ft. (Qty)			271,170 Required		$786,393.00	(partial finish - drop in/standard 2 x 4 ceiling tile per area)
Partial Casework (base and wall):	$450.00	ln.ft.			705 Required		$317,250.00	(refer to OSFC, OSDM for requirements)
Toilet Accessory Replacement	$0.20	sq.ft. (of entire building addition)			Required	Required	$55,188.80	(per building area)
Art Program Kiln:	$2,750.00	each			2 Required		$5,500.00	
Remove Demountable Partitions / Install New GWB Partitions:	$9.00	sq.ft. (Qty)			65,440 Required		$588,960.00	(includes the demolition of the demountable partition, new partition with 5/8'' abuse board, 10' high walls braced to structure above and the use of existing electric and data runs; unit price is based on floor area)
Kitchen Exhaust Hood:	$56,000.00	per unit			1 Required		$56,000.00	(includes fans, exhaust & ductwork)
Total Kitchen Equipment Replacement:	$190.00	sq.ft. (Qty)			5,221 Required		$991,990.00	(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)
Other: Door Refinishing	$350.00	each			363 Required		$127,050.00	Provide for sanding and refinishing of wood interior doors.
Other: Sound Control	$3.00	sq.ft. (Qty)			57,479 Required		$172,437.00	Provide for appropriate acoustical sound attenuation surface treatments in the Gymnasiums, Media Center, and Student Dining.
Sum:			$3,100,768.80	$0.00	$3,099,814.00	$954.80		

Finishes in Student Dining

Typical Interior Wood Door

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K. Interior Lighting

Description: The Classrooms are equipped with 2-lamp T-8 2x4 lay-in direct parabolic fluorescent fixtures with dual level switching. Classroom fixtures are in fair condition, providing an average illumination of 60 FC, thus complying with the 40 FC recommended by the OSDM. The Corridors are equipped with some incandescent can fixtures, along with 2-lamp T-8 2x4 lay-in direct parabolic fluorescent fixtures with single level switching. Corridor fixtures are in fair condition, providing an average illumination of 12 FC, which is less than the 15 FC recommended by the OSDM. The Primary Gymnasium spaces are equipped with 6-lamp T-8 2x4 suspended fluorescent fixtures type lighting, in good to fair condition, providing an average illumination of 54 FC, thus complying the 50 FC recommended by the OSDM. The Auxiliary Gymnasium spaces are equipped with 6-lamp T-8 2x4 suspended fluorescent fixtures type lighting, in good to fair condition, providing an average illumination of 49 FC, which is less than the 50 FC recommended by the OSDM. The Student Dining spaces are equipped with incandescent can fixtures and 3-lamp T-8 2x4 lay-in direct parabolic fluorescent fixtures type lighting, in good to fair condition, providing an average illumination of 45 FC, thus complying with the 40 FC recommended by the OSDM. The Media Center is equipped with incandescent can fixtures, T-8 1x4 suspended strip fluorescent fixtures (with indirect up-lighting), and 3-lamp T-8 2x4 lay-in direct parabolic fluorescent fixtures type lighting in fair condition, providing an average illumination of 45 FC, thus complying with the 30 FC recommended by the OSDM. The Kitchen spaces are equipped with 3-lamp T-8 2x4 lay-in direct parabolic fluorescent fixtures type lighting with dual level switching. Kitchen fixtures are in fair condition, providing an average illumination of 40 FC, which is less than the 50 FC recommended by the OSDM. The Service Areas in the overall facility are equipped with T-8 1x4 surface mount and suspended fluorescent fixture type lighting in fair condition, providing inadequate illumination based on OSDM requirements. The typical Administrative spaces in the overall facility are equipped with T-8 2x4 lay-in direct parabolic fluorescent fixture type lighting fixtures. Administrative fixtures are in fair condition, providing an average illumination of 53 FC, thus complying with the 40 FC recommended by the OSDM. The overall lighting systems of the facility are not fully compliant with Ohio School Design Manual requirements due to age, condition, utilization of incandescent fixtures, inadequate lighting levels, and lack of multi-level switching.

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Complete Building Lighting Replacement	$5.00	sq.ft. (of entire building addition)		Required	Required	Required	$1,410,180.00	Includes demo of existing fixtures
Sum:			$1,410,180.00	$30,460.00	$1,355,850.00	$23,870.00		

Classroom Fluorescent Light Fixtures

Gymnasium Fluorescent Light Fixtures

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L. Security Systems

Description: The overall facility contains a motion sensor, door contact, and CCTV camera type security system in fair condition. Motion detectors are not adequately provided in main entries, central gathering areas, offices, main Corridors, and spaces where 6 or more computers are located. Exterior doors are equipped with door contacts. An automatic visitor control system is provided. Compliant color CCTV cameras are inadequately provided at the main entry area, parking lots, central gathering areas, and main Corridors. CCTV is monitored in Administrative Area with the use of staff lap tops / computers. 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 / biometric readers. The security system is not adequately provided throughout, and the system is not fully compliant with Ohio School Design Manual guidelines. Due to existing grade configuration there are no playground fencing issues requiring attention. The exterior site lighting system is equipped with recessed and surface mounted incandescent and HID high pressure sodium entry lights in fair condition. Pedestrian walkways are illuminated with surface and pole mounted HID high pressure sodium light fixtures in fair condition. Parking and bus pick-up / drop off areas are illuminated by pole mounted HID high pressure sodium light fixtures in fair condition. The exterior site lighting system provides inadequate illumination due to insufficient fixture capacity, sparse placement of fixtures, age, and condition.

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Security System:	$1.85	sq.ft. (of entire building addition)		Required	Required	Required	$521,766.60	(complete, area of building)
Exterior Site Lighting:	$1.00	sq.ft. (of entire building addition)			Required	Required	$275,944.00	(complete, area of building)
Sum:			$797,710.60	$11,270.20	$772,834.50	$13,605.90		

Security System Motion Sensor

Pole Mounted HID High Pressure Sodium Light Fixture

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M. Emergency/Egress Lighting

Description: The overall facility is equipped with an emergency egress lighting system consisting of non compliant plastic construction exit signs, as well as OSDM compliant red lettered and LED illuminated exit signs, and the system is in fair condition. The facility is inadequately equipped with emergency egress floodlighting and recessed fluorescent lighting used as emergency egress lighting, and the system is in fair condition. The system is provided with inadequate battery backup and diesel powered emergency generator on separate circuits and the system is in fair to poor condition. The system is not adequately provided throughout, and does not fully 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	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Emergency/Egress Lighting:	$1.00	sq.ft. (of entire building addition)		Required	Required	Required	$282,036.00	(complete, area of building)
Sum:			$282,036.00	$6,092.00	$271,170.00	$4,774.00		

Exit Sign

Exit Sign

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N. Fire Alarm

Description: The overall facility is equipped with an addressable Simplex type fire alarm system, installed in 1990, and in fair condition, consisting of manual pull stations and audible horn and strobe indicating devices. The system is automatic and is monitored by a third party. The system appears to be equipped with sufficient audible horns and strobe indicating devices, however is not adequately equipped with smoke and duct detectors, flow switches, tamper switches, and heat sensors. The system thus will not support future fire suppression systems. The system is not 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 fire alarm system to meet OBC, NFPA, and Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Fire Alarm System:	$1.50	sq.ft. (of entire building addition)		Required	Required	Required	$423,054.00	(complete new system, including removal of existing)
Sum:			$423,054.00	$9,138.00	$406,755.00	$7,161.00		

Fire Alarm System Control Panel

Fire Alarm System Audible Horn and Strobe Indicating Device

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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 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 6 ADA power assist doors 11 are provided, which are in good condition. No playground issues were considered due to existing grade configuration. 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. Stairs do meet all ADA requirements. Elevation changes within the overall facility are facilitated by 7 ADA compliant stairwell towers, 2 ADA compliant service stair towers and 1 ADA compliant monumental stair, all of which are in good condition. This multistory building has 1 compliant elevator that accesses every floor and is in good condition. Access to the Stage is facilitated by a Corridor at Stage level. Interior doors are recessed, are provided with adequate clearances and ADA-compliant hardware. 31 ADA-compliant toilets are required, and 26 are currently provided. 31 ADA-compliant Restroom lavatories are required, and 27 are currently provided. 10 ADA-compliant Science Classroom lab stations are required, and 0 are currently provided. 8 ADA-compliant urinals are required, and 6 are currently provided. 14 ADA-compliant showers are required, and 0 are currently provided. 9 ADA-compliant electric water coolers are required, and 9 are currently provided. Toilet partitions are both metal and plastic and mostly do provide appropriate ADA clearances. ADA-compliant accessories are adequately provided and mounted. Mirrors do meet ADA requirements for mounting heights. Science Classrooms are not compliant with ADA requirements due lack of ADA compliant lab work stations in the classrooms. Health Clinic is fully compliant with ADA requirements and the designated Special Needs/Education Restroom is compliant with ADA requirements with the exception of an emergency shower. ADA signage is not provided on both the interior and the exterior of the building.

Rating: 3 Needs Replacement

Recommendations: To facilitate the school's meeting of ADA requirements, throughout the overall facility: Provide ADA-compliant signage on exterior and interior. Replace a total of 6 showers (1 shower per Locker Room) with ADA compliant showers. Replace a total of 6 countertop lavatories (1 per Boys and Girls Locker Room) with ADA compliant fixtures. Remount a total of 3 urinals (1 per Boys Locker Room) to ADA compliant height. Provide 1 ADA compliant wall mounted sink in Special Needs/Education Classroom. Reconfigure 16 toilet compartments (1 per Boys and Girls Locker Rooms and 1 per Boys and Girls Large Group Restrooms) to provide a fully ADA compliant toilet stall. Includes 16 toilets, 16 full set of accessories and 16 partitions. Reconfigure 2 Staff Restrooms located on the second floor to (2) Unisex toilet rooms and 8 Coach's Restrooms, to include 10 toilets, 10 lavatories, 3 urinals and 10 full sets of accessories including grab bars. Convert 8 existing shower stalls in the Coach's Restrooms to ADA compliant shower stalls. To be fully compliant, provide 3 sets of grab bars for Kitchen, Mechanical Room and Life Skills Restrooms'. All fixtures (whether new or replaced) to be mounted at the correct ADA compliant heights. Provide 70 ADA compliant pipe wrap throughout overall facility. Funding for ADA compliant Science Lab workstations and Special Needs/Education emergency shower is provided for in Item E.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Signage:	$0.20	sq.ft. (of entire building addition)		Required	Required	Required	$56,407.20	(per building area)
Toilet/Urinals/Sinks:	$3,800.00	unit			1 Required		$3,800.00	(new ADA)
Toilet/Urinals/Sinks:	$1,500.00	unit			6 Required		$9,000.00	(replacement ADA)
Other: ADA Pipe Wrap	$50.00	each			67 Required	3 Required	$3,500.00	Provide ADA compliant pipe wrap insulation on all wall mounted and countertop lavatories.
Other: ADA Shower Replacement	$1,000.00	each			6 Required		$6,000.00	Replace an existing shower head and/or ensemble with an ADA compliant shower head and/or ensemble.
Other: Convert Existing Shower to ADA Compliant Shower	$3,000.00	per restroom			8 Required		$24,000.00	Replace existing shower stall in Coach's Restrooms. Includes demolition, fixtures, accessories, supply lines and wall/floor repair.
Other: Grab bars	$345.00	each			3 Required		$1,035.00	Provide new set of grab bars to meet full ADA compliance. Includes mounting and wall repair.
Other: Reconfigure Toilet Room for ADA Compliance	$10,000.00	per restroom			10 Required		$100,000.00	Reconfigure existing toilet rooms to meet full ADA requirements. Includes fixtures, (toilets, lavatories, urinals), demolition, walls, door and hardware, supply lines and full set of ADA/Toilet accessories including grab bars.
Other: Reconfigure Toilet Stall to meet ADA Compliance	$3,500.00	per restroom			16 Required		$56,000.00	Reconfigure toilet stall to provide a full ADA compliant stall. Includes fixture, accessories, grab bars, partitions, demolition, floor and/or wall repair.
Other: Remount Urinal to ADA Compliant Height	$1,000.00	each			3 Required		$3,000.00	Remount existing urinal to ADA compliant height. Includes rough in and wall repair.
Sum:			$262,742.20	$1,218.40	$260,419.00	$1,104.80		

ADA Compliant Power Assisted Door-1990 Original Construction

ADA Compliant Electric Water Cooler -1990 Original Construction

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P. Site Condition

Description: The 53.89 acre relatively flat site with a steeply sloped ravine is located in a suburban residential and agricultural setting with generous tree and shrub type landscaping. Outbuildings include a maintenance storage shed, athletic equipment sheds, dugouts, restrooms and concession building, ticket booths, bleacher pressbox, and kiln building. There are apparent problems with erosion or ponding at the grass area near the hard surface play area. The erosion is caused by cars parking on the area. The site is bordered by heavily traveled city streets and interstate 270. Multiple entrances onto the site impede proper separation of bus and other vehicular traffic, and one way bus traffic is not provided. A bus loop is provided for student loading and unloading. Staff, visitor, and student parking is facilitated by multiple asphalt parking lots in fair condition, containing 696 parking places, which provides adequate parking for staff members, visitors, students, and the disabled. The site and parking lot drainage design, consisting of catch basins and storm inlets, provides adequate evacuation of storm water, and no problems with parking lot ponding were observed. Concrete curbs, in good to fair condition, are appropriately placed. 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 heavy duty concrete and is in fair condition, and is not equipped with a concrete pad area for dumpsters. There are two separate dumpster areas that are not equipped with a concrete pad. Exterior stairs are concrete, have been recently repaired, and are in good condition. Exterior stairs feature compliant metal handrails. Fencing is provided on three sides and is open to Hard Road. There is fencing and a stone embankment on the east property of the site providing separation from Interstate 270. A basketball court is provided on an asphalt surface in poor condition, and features 4 basketball goals in poor condition. The site is equipped with tables and benches in good condition. Due to existing grade configuration, no playground considerations are relevant. The athletic facilities are comprised of a football stadium with track, baseball, softball, batting cages, tennis courts, and are in good condition. Site features are suitable for outdoor instruction, which is enhanced through the District's provision of covered patios, tables, benches, and athletic equipment. There is a large ravine that runs through the site, and is a main feature of the architectural and landscape design. The building is built on top of this ravine and stream, and an arched tunnel is provided for the stream to continue through. The building features an open courtyard and covered patio for observation. Several walking trails are provided, as well as a bridge to cross the stream. Interstate 270 borders the south side of the site.

Rating: 2 Needs Repair

Recommendations: Provide for replacement asphalt wear layer. Provide 2 additional concrete dumpster pads. Provide erosion control measures for the grass area. Provide for the replacement of basketball goals at the hard surface play area. Replace concrete sidewalks as required due to condition. Repair raised masonry planting beds. Provide funding for site contingency.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Asphalt Paving / New Wearing Course:	$19.00	sq. yard			64,388 Required	1,314 Required	$1,248,338.00	(includes minor crack repair in less than 5% of paved area)
Concrete Sidewalk:	$4.69	sq.ft. (Qty)			11,270 Required	230 Required	$53,935.00	(5 inch exterior slab)
Stabilize soil erosion:	$2.50	sq.ft. (Qty)			93,100 Required	1,900 Required	$237,500.00	(includes stripping and re-grading)
Provide Concrete Dumpster Pad:	$2,400.00	each			1 Required	1 Required	$4,800.00	(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 100,000 SF or larger	$150,000.00	allowance			Required		$150,000.00	Include this one **or** the previous. (Applies for whole building, so only **one** addition should have this item)
Other: Repair Raised Masonry Planting Beds	$25.00	sq.ft. (Qty)			116 Required	4 Required	$3,000.00	Repair Raised Masonry Planting Beds
Other: Replace Exterior Basketball Backboards	$500.00	each			3 Required	1 Required	$2,000.00	Provide for the replacement of exterior basketball backboards due to condition.
Sum:			$1,749,573.00	$0.00	$1,715,778.30	$33,794.70		

Condition of Concrete Sidewalk

Raised Masonry Planting Bed

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Q. Sewage System

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

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00	$0.00		

Sanitary Manhole

Storm Manhole

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R. Water Supply

Description: The domestic water supply system is tied in to the city system, features 6'' service, with the water meter located in a pit outside the facility, and is in fair condition. The District was not able to provide water supply flow test data. The existing domestic water service appears to meet the facility's current needs. The 1990 Original Construction and 1990 Auditorium Fixed Seating Area are equipped with a compliant automated fire suppression system fed from a separate 8'' hydraulic fire service, which provides adequate support. The 1998 Addition is not equipped with an automated fire suppression system, but the existing water supply will provide adequate support for a future system. The domestic water service is equipped with a water booster pump providing approximately 65 psi, which is adequate, and in fair condition. The system appears to provide adequate pressure and capacity 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	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00	$0.00		

Incoming Domestic Water Service Line

Incoming Domestic Water Service Line Booster Pump

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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 good condition. Typical exterior doors feature no vision panels, and appropriate hardware. Entrance doors in the overall facility are aluminum type construction, installed on aluminum frames, and in good condition. Entrance doors feature single glazed insulated tempered glass vision panels, transoms, sidelights, and appropriate hardware. The facility is equipped with 1 roof access door, which is in good condition. Overhead doors are steel coiling type in good condition.

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00	$0.00		

Aluminum Entrance Doors

Hollow Metal Door

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T. Hazardous Material

Description: The School District did not provide an AHERA three year reinspection report for this facility. This facility was constructed in 1990 and is asbestos free. There are no underground storage tanks on the site. Due to the construction date, there is no potential for lead based paint. Fluorescent lighting will require special disposal.

Rating: 1 Satisfactory

Recommendations: Provide for disposal of fluorescent lighting.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Environmental Hazards Form					EHA Form	EHA Form	—	
Fluorescent Lamps & Ballasts Recycling/Incineration	$0.10	sq.ft. (Qty)			216,936 Required	3,820 Required	$22,075.60	
Sum:			$22,075.60	$0.00	$21,693.60	$382.00		

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U. Life Safety

Description: The 1990 Original Construction is equipped with a compliant automated fire suppression system, which is in good condition. The 1998 Addition is not equipped with a compliant automated fire suppression system. Exit Corridors are situated such that dead-end Corridors are not present. The facility features 7 interior stair towers, 2 service stair towers, which are protected by a compliant two hour fire enclosure and 1 interior monumental stairway, which is not enclosed, though no enclosure is needed. The facility does not have any exterior stairways from intermediate floors. Compliant guard walls were observed in the Southwest stair tower. Guardrails in the Northwest stair tower are constructed with horizontal bars with greater than 4'' clearances, do not meet the 4'' ball test, are constructed in a ladder effect and do extend past the top and bottom stair risers. In the remaining 5 stair towers, no guardrails were observed. Handrails were anchored directly to the wall at the proper height. The 2 service stairways were constructed with horizontal bars with greater than 4'' clearances, do not meet the 4'' ball test, are constructed in a ladder effect, and do extend past the top and bottom stair risers as required by the Ohio Building Code. The monumental stairway located in the Cafeteria, is constructed with a combination of vertical and horizontal bars with greater than 4'' clearances, do not meet the 4'' ball test and do extend past the top and bottom stair risers as required by the Ohio Building Code. The Kitchen hood is in fair condition, and is equipped with the required UL 300 compliant wet chemical fire suppression system. The required 6'' overhang of the cooking equipment is provided by the hood. Kitchen hood exhaust ductwork is of proper construction, material and insulation and is installed as required by the OSDM and OBCMC. 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 equipped with an emergency generator. The emergency generator is a diesel type unit, is located outside the building, which currently supports the illuminated exit signs, emergency egress floodlighting, fire pump and fire alarm system. The emergency generator is in fair to poor 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 municipal system and is sufficient 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: In the 1998 Addition, provide new automated fire suppression system to meet Ohio School Design Manual guidelines. Provide new emergency generator, with funding provided via complete replacement of electrical system in Item D. Retrofit the guard rail in the Northwest stair tower with additional horizontal bars to meet the requirements of the Ohio Building Code. Retrofit existing guard rails with additional vertical bars on the monumental stairway located in the Cafeteria to meet the requirements of the Ohio Building Code. Due to the function of the service stairways, no corrections to the guardrails is required. Funding for replacement of Kitchen hood provided for in Item J.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
Sprinkler / Fire Suppression System:	$3.20	sq.ft. (Qty)				4,774 Required	$15,276.80	(includes increase of service piping, if required)
Other: Partial Upgrade to Guardrails	$2,500.00	per level			4 Required		$10,000.00	Provide additional vertical and/or horizontal bars to guard rail on stairway in Cafeteria.
Sum:			$25,276.80	$0.00	$10,000.00	$15,276.80		

Compliant Fire Extinguisher

Compliant Enclosed Egress Stairway

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V. Loose Furnishings

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

Rating: 2 Needs Repair

Recommendations: Provide for replacement of outdated or inadequate furnishings.

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
CEFPI Rating 7	$2.00	sq.ft. (of entire building addition)			Required	Required	$551,888.00	
Sum:			$551,888.00	$0.00	$542,340.00	$9,548.00		

Typical Teacher Desk

Typical Student Desk and Chairs

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W. Technology

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

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Auditorium Fixed Seating Area (1990) 6,092 ft²	Original Construction (1990) 271,170 ft²	Weight Room Addition (1998) 4,774 ft²	Sum	Comments
HS portion of building with total SF > 200,400	$5.80	sq.ft. (Qty)		6,092 Required	271,170 Required	4,774 Required	$1,635,808.80	
Sum:			$1,635,808.80	$35,333.60	$1,572,786.00	$27,689.20		

Data Rack

Classroom Phone

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X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		$28,208,387.10
7.00%	Construction Contingency	$1,974,587.10
Subtotal		$30,182,974.20
16.29%	Non-Construction Costs	$4,916,806.50
Total Project		**$35,099,780.69**

Construction Contingency	$1,974,587.10
Non-Construction Costs	$4,916,806.50
Total for X.	**$6,891,393.59**

Non-Construction Costs Breakdown		
Land Survey	0.03%	$9,054.89
Soil Borings / Phase I Envir. Report	0.10%	$30,182.97
Agency Approval Fees (Bldg. Code)	0.25%	$75,457.44
Construction Testing	0.40%	$120,731.90
Printing - Bid Documents	0.15%	$45,274.46
Advertising for Bids	0.02%	$6,036.59
Builder’s Risk Insurance	0.12%	$36,219.57
Design Professional’s Compensation	7.50%	$2,263,723.06
CM Compensation	6.00%	$1,810,978.45
Commissioning	0.60%	$181,097.85
Non-Construction Contingency (includes partnering and mediation services)	1.12%	$338,049.31
Total Non-Construction Costs	**16.29%**	**$4,916,806.50**

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Name of Appraiser	Julie Apt	**Date of Appraisal**	2015-09-28
Building Name	Worthington Kilbourne High		
Street Address	1499 Hard Road		
City/Town, State, Zip Code	Columbus, OH 43235		
Telephone Number(s)	(614)450-6400		
School District	Worthington City		

Setting: Suburban

Site-Acreage	54.40	Building Square Footage	282,036
Grades Housed	9-12	Student Capacity	1,776
Number of Teaching Stations	85	Number of Floors	2
Student Enrollment	1113		
Dates of Construction	1990,1990,1998		

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

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

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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	25
		The site is 53.89 acres compared to 47 acres required by the OSDM.		
1.2		**Site is easily accessible** and conveniently located for the present and future population	20	20
		The School is centrally located within the School District, and is easily accessible.		
1.3		**Location** is removed from undesirable business, industry, traffic, and natural hazards	10	7
		The site is adjacent to residential uses, another school property, as well as Interstate 270.		
1.4		Site is **well landscaped and developed** to meet educational needs	10	10
		The site has been developed with outdoor learning spaces and athletic fields to enhance the learning environment. The site is generously landscaped with mature shade trees, ornamental trees, and shrubs which define the property and emphasize the building entrance. Lawn areas where mowing is required do not exceed 3:1 slope.		
1.5	ES	Well equipped **playgrounds are separated** from streets and parking areas	10	8
	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		
		Athletic facilities include a football stadium with track, baseball, softball, batting cages, tennis courts, and basketball courts, which are provided with proper separation from vehicular use areas, and are provided with adequate solid surface parking		
1.6		**Topography** is varied enough to provide desirable appearance and without steep inclines	5	4
		The site is properly sloped to provided positive drainage across the site. There is a large ravine that runs through the site, and is a main feature of the architectural and landscape design. A flat area is provided to accommodate buildings, perimeter walks, vehicular circulation, parking areas, outdoor play areas, and physical education spaces, and is desirable.		
1.7		Site has stable, well drained **soil free of erosion**	5	3
		Soils appear to be stable and well drained, although erosion was evident at edges of sidewalks and pavement.		
1.8		Site is suitable for **special instructional needs**, e.g., outdoor learning	5	5
		The site has been developed to accommodate outdoor learning, including benches and picnic tables to facilitate instruction.		
1.9		**Pedestrian services** include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes	5	5
		Sidewalks are adequately provided to accommodate safe pedestrian circulation including designated crosswalks, curb cuts, and correct slopes.		
1.10	ES/MS	Sufficient **on-site, solid surface parking** for faculty and staff is provided	5	4
	HS	Sufficient **on-site, solid surface parking** is provided for faculty, students, staff and community		
		Adequate parking is provided for faculty, staff, community and student parking, and is located on asphalt pavement in fair condition.		
		TOTAL - The School Site	**100**	**91**

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2.0 Structural and Mechanical Features

School Facility Appraisal

Structural		Points Allocated	Points
2.1	Structure meets all **barrier-free** requirements both externally and internally	15	13
	Entire building meets all ADA requirements except Restrooms and signage.		
2.2	**Roofs** appear sound, have positive drainage, and are weather tight	15	8
	The roofs over the entire building are in fair condition but require replacement due to age of systems.		
2.3	**Foundations** are strong and stable with no observable cracks	10	10
	Foundations are in good condition with no observable cracks.		
2.4	**Exterior and interior walls** have sufficient expansion joints and are free of deterioration	10	10
	Exterior and interior walls are in good condition, have sufficient control and expansion joints, and are free from deterioration.		
2.5	**Entrances and exits** are located so as to permit efficient student traffic flow	10	10
	Exits are properly located to allow safe egress from the building.		
2.6	**Building ''envelope''** generally provides for energy conservation (see criteria)	10	10
	Building envelope exceeds minimum energy conservation requirements.		
2.7	Structure is **free of friable asbestos** and **toxic materials**	10	8
	The building was constructed in 1990 and is reported to be free of asbestos.		
2.8	Interior walls permit sufficient **flexibility** for a variety of class sizes	10	6
	Flexible partition walls have been provided between some Classrooms and allow for a variety of class sizes. The majority of the Classroom walls are demountable partitions, which are not OSDM compliant.		

Mechanical/Electrical		Points Allocated	Points
2.9	**Adequate light sources** are well maintained, and properly placed and are not subject to overheating	15	6
	Light sources are improperly placed and provide inadequate lighting in some areas. Fixtures are well maintained in most areas. Light fixtures do not appear to be subject to overheating.		
2.10	**Internal water supply** is adequate with sufficient pressure to meet health and safety requirements	15	12
	Internal water supply will support a future fire suppression system, and is adequate for current requirements.		
2.11	Each teaching/learning area has adequate convenient **wall outlets**, phone and computer cabling for technology applications	15	2
	Classrooms have an inadequate number of outlets and data jacks for technology applications.		

2.12	**Electrical controls** are safely protected with **disconnect switches** easily accessible	10	8
	Disconnect switches are provided in required easily accessible locations to allow for safe servicing of equipment.		
2.13	**Drinking fountains** are adequate in number and placement, and are properly maintained including provisions for the disabled	10	10
	Drinking fountains are adequate in number and placement, and meet ADA requirements. Drinking fountains are properly maintained.		
2.14	Number and size of **restrooms meet requirements**	10	10
	The number and size of Restrooms meet requirements.		
2.15	**Drainage systems** are properly maintained and meet requirements	10	10
	Adequate drainage systems are provided throughout the facility. Drainage systems are well maintained.		
2.16	**Fire alarms, smoke detectors, and sprinkler systems** are properly maintained and meet requirements	10	6
	The fire alarm system does not meet requirements. Smoke detectors are not adequately provided. The facility is fully sprinkled.		
2.17	**Intercommunication system** consists of a central unit that allows dependable **two-way communication** between the office and instructional areas	10	8
	The central intercommunication system appears to provide reliable two way communication (through the phone system) between the Administration area and all the teaching/learning areas.		
2.18	**Exterior water supply** is sufficient and available for normal usage	5	5
	Exterior wall hydrants are adequately provided around the exterior of the facility.		
	TOTAL - Structural and Mechanical Features	**200**	**152**

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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	15	15
	Exterior materials and finishes for doors, windows and walls are durable and require minimal maintenance.		
3.2	**Floor surfaces** throughout the building require minimum care	15	12
	Flooring throughout the facility consists of VCT, linoleum, wood, sealed concrete, ceramic tile, and carpet, which is well maintained throughout the facility.		
3.3	**Ceilings and walls** throughout the building, including service areas, are easily cleaned and resistant to stain	10	7
	Lay-in type ceilings are not easily cleaned or resistant to stain. Painted block and demountable partitions are easily cleaned and resistant to stain. Drywall type wall finishes are not easily cleaned and resistant to stain.		
3.4	**Built-in equipment** is designed and constructed for ease of maintenance	10	8
	Casework is wood type construction with plastic laminate tops, is well constructed and in good to fair condition where provided.		
3.5	**Finishes and hardware**, with compatible keying system, are of durable quality	10	10
	Door hardware is consistent throughout the facility, and meets ADA requirements.		
3.6	**Restroom fixtures** are wall mounted and of quality finish	10	8
	Fixtures are floor and wall mounted and are of good quality.		
3.7	Adequate **custodial storage space** with water and drain is accessible throughout the building	10	10
	Custodial storage space is adequately located throughout the facility, including provisions for water and drains.		
3.8	Adequate **electrical outlets and power**, to permit routine cleaning, are available in every area	10	8
	Electrical outlets are adequately provided in Corridors and allow for convenient routine cleaning.		
3.9	**Outdoor light fixtures, electrical outlets**, equipment, and other fixtures are accessible for repair and replacement	10	4
	Outdoor light fixtures are provided inadequately, but are accessible for repair and replacement. Electrical outlets are adequately provided around the exterior of the facility.		
	TOTAL - Plant Maintainability	**100**	**82**

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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	15	12
		Student loading is separated from vehicular traffic and pedestrian walkways.		
4.2		**Walkways**, both on and offsite, are available for safety of pedestrians	10	10
		Walkways are adequately provided both on and off-site for pedestrian safety.		
4.3		**Access streets** have sufficient signals and signs to permit safe entrance to and exit from school area	5	5
		School signs and signals are located as required on adjacent access streets.		
4.4		**Vehicular entrances and exits** permit safe traffic flow	5	2
		Buses and other vehicular traffic use the same entrance and exit points to the site, which does not provide safe vehicular traffic flow.		
4.5	ES	**Playground equipment** is free from hazard	5	4
	MS	Location and types of **intramural equipment** are free from hazard		
	HS	**Athletic field equipment** is properly located and is free from hazard		
		Athletic field equipment is properly located and is free from hazard.		

Building Safety			Points Allocated	Points
4.6		**The heating unit(s)** is located away from student occupied areas	20	18
		Heating systems are located on the areas that are not accessible by students.		
4.7		Multi-story buildings have at least **two stairways** for student egress	15	11
		The building does have 5 stairways, which are enclosed, and are mostly ADA and OBC compliant.		
4.8		**Exterior doors** open outward and are equipped with panic hardware	10	10
		Exterior doors open in the direction of travel and are equipped with panic hardware.		
4.9		**Emergency lighting** is provided throughout the entire building with exit signs on separate electrical circuits	10	8
		Emergency light fixtures and exit signs are on separate circuits and appear to be adequately provided.		
4.10		**Classroom doors** are recessed and open outward	10	10
		Classroom doors are adequately recessed with proper ADA clearances, and open outward.		
4.11		**Building security systems** are provided to assure uninterrupted operation of the educational program	10	4
		Security systems are inadequately provided and are in fair condition.		

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

Terrazzo and VCT flooring has been well maintained throughout the facility. Stairways have rubber treads that are maintained in a non-slip condition. Stairways have sealed concrete flooring that is maintained in a non-slip condition.

4.13	**Stair risers** (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16	5	4

Stair treads and risers are properly designed and meet requirements.

4.14	**Glass** is properly located and protected with wire or safety material to prevent accidental student injury	5	4

Glass at door transoms and sidelights is tempered for safety.

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

Electric water coolers have been recessed from the Corridor wall.

4.16	**Traffic areas** terminate at an exit or a stairway leading to an egress	5	4

Exits are properly located to allow safe egress from the building. Most stairways empty to the exterior, or adjacent to a Corridor leading to the exterior. There are no dead-end Corridors in the building.

Emergency Safety		Points Allocated	Points
4.17	Adequate **fire safety equipment** is properly located	15	6

The facility is fully sprinkled. Fire alarm devices are not provided adequately. Fire extinguishers are adequately provided.

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

Multiple exits are provided from Corridors throughout the facility. There are no dead-end Corridors in the building.

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

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

4.20	Automatic and manual **emergency alarm system** with a distinctive sound and flashing light is provided	15	6

The fire alarm is provided with manual and automatic actuation, but is not adequately provided with all required devices.

TOTAL - Building Safety and Security	**200**	**158**

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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	15
	The average Classroom is 850 SF compared to 900 SF required by the OSDM.			
5.2		**Classroom space** permits arrangements for small group activity	15	9
	Some undersized Classrooms do not allow sufficient space for effective small group activities.			
5.3		**Location of academic learning areas** is near related educational activities and away from disruptive noise	10	10
	The Gymnasium and Music program are properly isolated from the academic learning areas to reduce distractions.			
5.4		**Personal space** in the classroom away from group instruction allows privacy time for individual students	10	6
	Some undersized Classrooms do not permit privacy time for individual students.			
5.5		**Storage for student materials** is adequate	10	8
	Lockers, located in the Corridor, are adequately provided for student storage.			
5.6		**Storage for teacher materials** is adequate	10	4
	Casework is inadequately provided for storage of teacher materials.			

Special Learning Space			Points Allocated	Points
5.7		**Size of special learning area(s)** meets standards	15	15
	Special Education Classrooms are appropriately sized, and meet standards. The Special Education Classrooms are approximately 1,000 SF compared to 900 SF recommended in the OSDM.			
5.8		**Design of specialized learning area(s)** is compatible with instructional need	10	10
	Special Education spaces are properly designed to meet instructional needs.			
5.9		**Library/Resource/Media Center** provides appropriate and attractive space	10	10
	The Media Center is 12,231 SF compared to 3,896 SF recommended in the OSDM. The Media Center is an attractive space, including natural light and sufficient book storage space.			
5.10		**Gymnasium (or covered P.E. area)** adequately serves physical education instruction	5	5
	The Primary Gymnasium is 11,430 SF compared to 10,000 to 20,000 SF recommended in the OSDM. The Auxiliary Gymnasium is 22,408 SF compared to 7,000 SF recommended in the OSDM.			
5.11	ES	**Pre-kindergarten and kindergarten space** is appropriate for age of students and nature of instruction	10	10

MS/HS **Science** program is provided sufficient space and equipment

Science Classrooms are appropriately sized and equipped for effective science instruction.

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

Two Music Rooms total 6,506 SF compared to 1,800-3,000 recommended in the OSDM. The Music Room is designed appropriately, including acoustic panels on walls and ceilings.

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

Three Art Rooms total 4,186 SF compared to 1,200 SF recommended in the OSDM. The Art Room is appropriately designed for instruction and includes sufficient space for storage of supplies and equipment.

School Facility Appraisal		Points Allocated	Points
5.14	**Space for technology education** permits use of state-of-the-art equipment	5	4

The facility is provided with Computer Labs for student use.

5.15	Space for **small groups and remedial instruction** is provided adjacent to classrooms	5	4

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

5.16	**Storage for student and teacher material** is adequate	5	3

Lockers have been adequately provided for storage of student materials. Casework is not adequately provided for storage of teacher materials.

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

Multiple Teacher's Lounges and work areas are provided throughout the facility. Teachers are provided with separate open office areas which reflect a professional environment and include adequate work space.

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

The Student Dining space is 11,410 SF compared to 3,000 SF recommended in the OSDM. The Kitchen space is 5,221 SF compared to 3,896 SF recommended in the OSDM. The Student Dining space is attractive with adequate space for seating.

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

Administrative Offices are adequately provided for High School students.

5.20	**Counselor's office** insures privacy and sufficient storage	5	4

The Counseling and Administration Center is approximately 7,100 SF. Typical Offices are 175 SF and the spaces insure privacy and are provided with adequate storage space.

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

The Clinic is 870 SF compared to 370 SF recommended in the OSDM. The Clinic is located within the Administrative Offices and is provided with required equipment.

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

Reception space consists of approximately 1,650 SF compared to 200-400 SF recommended by the OSDM.

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

The Administrative area consists of approximately 10,600 SF for the principal, assistant principal, secretary, Conference Rooms, Storage, Copy Rooms, and Restrooms, compared to 2,600 SF recommended by the OSDM. The Administrative areas within this square footage also includes Counselor Offices, Attendance Offices, and teacher work areas.

	TOTAL - Educational Adequacy	**200**	**167**

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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	15	15
	The building is a traditional design with classical detailing, which is aesthetically pleasing.		
6.2	Site and building are **well landscaped**	10	10
	The site is generously landscaped with mature shade trees, ornamental trees, and shrubs which define the property and emphasize the building entrance. Lawn areas where mowing is required do not exceed 3:1 slope. The site has been developed with outdoor learning spaces and athletic fields to enhance the learning environment.		
6.3	**Exterior noise and poor environment** do not disrupt learning	10	7
	The site is adjacent to residential uses, another school property, as well as Interstate 270.		
6.4	**Entrances and walkways** are **sheltered** from sun and inclement weather	10	10
	The main entrance to the School is completely sheltered.		
6.5	**Building materials** provide attractive color and texture	5	5
	Exterior building materials consist of brick, stone, and stucco which does provide an attractive color and texture.		

Interior Environment		Points Allocated	Points
6.6	**Color schemes, building materials, and decor** provide an impetus to learning	20	20
	The color palette is comprised of cool base with accent color of 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 continuity.		
6.7	**Year around comfortable temperature and humidity** are provided throughout the building	15	12
	The facility is fully air conditioned to provide year-round temperature and humidity control.		
6.8	**Ventilating system** provides adequate quiet circulation of clean air and meets 15cfm VBC requirement	15	12
	The ventilating systems appear to provide an adequate quantity of ventilation air to the spaces. Ventilation systems introduce minimal noise into the teaching and learning areas.		
6.9	**Lighting system** provides proper intensity, diffusion, and distribution of illumination	15	6
	The lighting system does not provide proper intensity in some areas. Location of lighting fixtures provides uneven distribution of illumination. Diffusion of illumination is adequately provided by the light fixture lenses.		
6.10	**Drinking fountains and restroom facilities** are conveniently located	15	14
	Drinking fountains and Restroom facilities are conveniently located.		
6.11	**Communication among students** is enhanced by commons area(s) for socialization	10	10

There are areas for students to gather in the Student Dining area, Auditorium, and Gymnasium, as well as a small gathering area at the entrance to the school.

6.12	**Traffic flow** is aided by appropriate foyers and corridors	10	9

Corridors and Foyers are adequately designed for efficient traffic flow. Classroom doorways are recessed and do not impede traffic flow. Classroom doors that are not recessed either open inward or lay flat against the wall and do not impede traffic flow.

6.13	**Areas for students to interact** are suitable to the age group	10	10

There are areas for students to gather in the Student Dining area, Auditorium, and Gymnasium, as well as a small gathering area at the entrance to the school.

6.14	**Large group areas are designed** for effective management of students	10	10

The Gymnasium is adequately designed to manage large groups of students. The Auditorium is adequately designed to manage large groups of students.

6.15	**Acoustical treatment** of ceilings, walls, and floors provides effective sound control	10	7

Existing Gymnasiums, Student Dining, and Media Center spaces are inadequately provided with effective sound control measures. Existing Music spaces are adequately provided with effective sound control measures.

6.16	**Window design** contributes to a pleasant environment	10	10

The windows are fairly well designed to contribute to a pleasant environment.

6.17	**Furniture and equipment** provide a pleasing atmosphere	10	7

Classroom furniture is somewhat consistent in design with some mismatched items, and in fair condition.

	TOTAL - Environment for Education	**200**	**174**

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LEED Observation Notes

School District:	Worthington City
County:	Franklin
School District IRN:	45138
Building:	Worthington Kilbourne High
Building IRN:	112094

Sustainable Sites

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

(source: LEED Reference Guide, 2001:9)

The amount of asphalt is a negligible contribution to the heat island effect for non-roofs (see SS Credit 7.1). Open space is effectively maximized at this site (see SS Credit 5.2). The size of the parking area exceeds the amount required with 696 spaces provided and 467 spaces required (see SS Credit 4.4). Reducing the amount of redundant asphalt and providing softer landscape elements including grasses, shrubs and flora, would contribute to a reduction in the heat island effect. Two Courtyards/Ravines provide soft landscape features that contribute to the heat island reduction. Roof surfaces have low reflectance and high thermal emittance, which contributes to the heat island effect. Utilizing cool roofs with a lower thermal emittance would contribute to the reduction of the heat island effect (see SS Credit 7.2).

Water Efficiency

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

(source: LEED Reference Guide, 2001:65)

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

Energy & Atmosphere

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

(source: LEED Reference Guide, 2001:93)

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

Material & Resources

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

(source: LEED Reference Guide, 2001:167)

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

Indoor Environmental Quality

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

(source: LEED Reference Guide, 2001:215)

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

Innovation & Design Process

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

(source: LEED Reference Guide, 2001:271)

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

Justification for Allocation of Points

Building Name and Level: **Worthington Kilbourne High**

9-12

Building features that clearly exceed criteria:

1. The Media Center is oversized.
2. The Special Education Rooms are oversized and appear to be adequately equipped.
3. The Music Rooms are oversized.
4. The site is oversized, and includes athletic facilities.
5.
6.

Building features that are non-existent or very inadequate:

1. The school is not fully compliant with ADA requirements with regards to Locker Room Restrooms, signage and science lab workstations.
2. The Classrooms are undersized.
3.
4.
5.
6.

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Environmental Hazards Assessment Cost Estimates

Owner:	Worthington City
Facility:	Worthington Kilbourne High
Date of Initial Assessment:	Sep 28, 2015
Date of Assessment Update:	Dec 20, 2015
Cost Set:	2015

District IRN:	45138
Building IRN:	112094
Firm:	SBDP

Scope remains unchanged after cost updates.

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1990 Auditorium Fixed Seating Area	6,092	$0.00	$0.00
1990 Original Construction	271,170	$21,693.60	$21,693.60
1998 Weight Room Addition	4,774	$382.00	$382.00
Total	282,036	$22,075.60	$22,075.60
Total with Regional Cost Factor (100.00%)	—	$22,075.60	$22,075.60
Regional Total with Soft Costs & Contingency	—	$27,468.74	$27,468.74

Environmental Hazards - Worthington City (45138) - Worthington Kilbourne High (112094) - Original Construction

Owner:	Worthington City	**Bldg. IRN:**	112094
Facility:	Worthington Kilbourne High	**BuildingAdd:**	Original Construction
Date On-Site:		**Consultant Name:**	

A. Asbestos Containing Material (ACM) — AFM=Asbestos Free Material

	ACM Found	Status	Quantity	Unit Cost	Estimated Cost
1.	Boiler/Furnace Insulation Removal	Not Present	0	$10.00	$0.00
2.	Breeching Insulation Removal	Not Present	0	$10.00	$0.00
3.	Tank Insulation Removal	Not Present	0	$8.00	$0.00
4.	Duct Insulation Removal	Not Present	0	$8.00	$0.00
5.	Pipe Insulation Removal	Not Present	0	$10.00	$0.00
6.	Pipe Fitting Insulation Removal	Not Present	0	$20.00	$0.00
7.	Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	$12.00	$0.00
8.	Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	$30.00	$0.00
9.	Pipe Insulation Removal (Hidden in Walls/Ceilings)	Not Present	0	$15.00	$0.00
10.	Dismantling of Boiler/Furnace/Incinerator	Not Present	0	$2,000.00	$0.00
11.	Flexible Duct Connection Removal	Not Present	0	$100.00	$0.00
12.	Acoustical Plaster Removal	Not Present	0	$7.00	$0.00
13.	Fireproofing Removal	Not Present	0	$25.00	$0.00
14.	Hard Plaster Removal	Not Present	0	$7.00	$0.00
15.	Gypsum Board Removal	Not Present	0	$6.00	$0.00
16.	Acoustical Panel/Tile Ceiling Removal	Not Present	0	$3.00	$0.00
17.	Laboratory Table/Counter Top Removal	Not Present	0	$100.00	$0.00
18.	Cement Board Removal	Not Present	0	$5.00	$0.00
19.	Electric Cord Insulation Removal	Not Present	0	$1.00	$0.00
20.	Light (Reflector) Fixture Removal	Not Present	0	$50.00	$0.00
21.	Sheet Flooring with Friable Backer Removal	Not Present	0	$4.00	$0.00
22.	Fire Door Removal	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 — ☑ None Reported

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

C. Lead-Based Paint (LBP) - Renovation Only — ☑ Addition Constructed after 1980

1.	Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups		$0.00
2.	Special Engineering Fees for LBP Mock-Ups		$0.00
3.	(Sum of Lines 1-2)	**Total Cost for Lead-Based Paint Mock-Ups**	$0.00

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

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	271170	216936	$0.10	$21,693.60

E. Other Environmental Hazards/Remarks — ☑ None Reported

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

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E1	**Total Cost for Env. Hazards Work - Renovation**	$21,693.60
2.	A36, B1, D1, and E2	**Total Cost for Env. Hazards Work - Demolition**	$21,693.60

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

a. Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.

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

c. Unless reported otherwise by the District, all roofing materials are assumed to be asbestos-free.

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

Environmental Hazards - Worthington City (45138) - Worthington Kilbourne High (112094) - Weight Room Addition

Owner:	Worthington City	**Bldg. IRN:**	112094
Facility:	Worthington Kilbourne High	**BuildingAdd:**	Weight Room Addition
Date On-Site:		**Consultant Name:**	

A. Asbestos Containing Material (ACM) — AFM=Asbestos Free Material

	ACM Found	Status	Quantity	Unit Cost	Estimated Cost
1.	Boiler/Furnace Insulation Removal	Not Present	0	$10.00	$0.00
2.	Breeching Insulation Removal	Not Present	0	$10.00	$0.00
3.	Tank Insulation Removal	Not Present	0	$8.00	$0.00
4.	Duct Insulation Removal	Not Present	0	$8.00	$0.00
5.	Pipe Insulation Removal	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 — ☑ None Reported

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

C. Lead-Based Paint (LBP) - Renovation Only — ☑ Addition Constructed after 1980

1.	Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups		$0.00
2.	Special Engineering Fees for LBP Mock-Ups		$0.00
3.	(Sum of Lines 1-2)	**Total Cost for Lead-Based Paint Mock-Ups**	$0.00

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

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	4774	3820	$0.10	$382.00

E. Other Environmental Hazards/Remarks — ☑ None Reported

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

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E1	**Total Cost for Env. Hazards Work - Renovation**	$382.00
2.	A36, B1, D1, and E2	**Total Cost for Env. Hazards Work - Demolition**	$382.00

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

a. Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.

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

c. Unless reported otherwise by the District, all roofing materials are assumed to be asbestos-free.

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