Building Information - Nordonia Hills City (50047) - Nordonia Middle

Program Type	Expedited Local Partnership Program (ELPP)
Setting	Suburban
Assessment Name	Nordonia Middle School (Updated 2021) DRAFT
Assessment Date (on-site; non-EEA)	2019-09-19
Kitchen Type	Full Kitchen
Cost Set:	2021
Building Name	Nordonia Middle
Building IRN	27326
Building Address	73 Leonard Ave
Building City	Northfield
Building Zipcode	44067
Building Phone	330-467-0584
Acreage	10.00
Current Grades:	7-8
Teaching Stations	38
Number of Floors	4
Student Capacity	644
Current Enrollment	603
Enrollment Date	2019-09-19
Enrollment Date is the date in which the o	current enrollment was taken.
Number of Classrooms	35
Historical Register	NO
Building's Principal	Mr. Bryan Seward
Building Type	Middle

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Building Pictures - Nordonia Hills City(50047) - Nordonia Middle(27326)



South elevation photo:





GENERAL DESCRIPTION

109,879 Total Existing Square Footage 1928,1969,2001 Building Dates 7-8 Grades 603 Current Enrollment 38 Teaching Stations 10.00 Site Acreage

Nordonia Middle School, which is not on the National Register of Historic Buildings, and originally constructed in 1928, is a 3 story, 109,879 square foot brick school building located in a suburban residential and commercial setting. The existing facility features a conventionally partitioned design, and does not utilize modular buildings. The structure of the overall facility contains brick exterior wall construction, with CMU wall construction in the interior. The floor system consists of slab on grade and supported slab. The roofing system of the overall facility is ballasted membrane, installed over 7 years ago. The ventilation system of the building is adequate to meet the needs of the users. The Classrooms are undersized in terms of the current standards established by the State of Ohio. Physical Education and Student Dining spaces consist of 6,538 SF Primary Gymnasium with 4,097 SF Auxiliary Gymnasium and separate Student Dining. The facility is equipped with a non-compliant security system. The building does not have a compliant automatic fire alarm system. The facility is not equipped with an automated fire suppression system. The building is reported to contain asbestos. The overall building is compliant with ADA accessibility requirements. The school is located on a 10 acre site adjacent to residential and commercial properties. The property and athletic facilities are partially fenced for security. Access onto the site is unrestricted. Site circulation is poor. There is no dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is adequate.

No Significant Findings

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Building Construction Information - Nordonia Hills City (50047) - Nordonia Middle (27326)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition	Built Under ELPP
Original Building	1928	yes	4	45,482	no	no
Addition	1969	yes	4	48,924	no	no
Gymnasium Addition	2001	yes	2	15,473	no	no

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Building Component Information - Nordonia Hills City (50047) - Nordonia Middle (27326)

Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Original Building (1928)		9421			3573									
Addition (1969)		10980					2841	1615						4097
Gymnasium Addition (2001)		790		6538										
Total	0	21,191	0	6,538	3,573	0	2,841	1,615	0	0	0	0	0	4,097
Master Planning C	Consideration	S												

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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 - Nordonia Middle (27326)

						<u> </u>							
	rdonia Hills City	/				County:	Summit		Northeaste	rn Ohio (8)			
	rdonia Middle					Contact:	Mr. Bryan Sewa	rd					
Address: 73						Phone:	330-467-0584						
	rthfield,OH 440	67				-	ed: 2019-09-19	By:	Tony Schor				
Bldg. IRN: 273	326					Date Revise	d: 2021-12-08	By:	Annalise Be	ennett			
Current Grades		7-8	Acreage:				Suitability Appraisal	Summa	ry				
Proposed Grac	les	N/A	Teaching	Static	ons:	38							
Current Enrollr	nent	603	Classroor	ms:		35	Sect	tion		Points Possible	Points Earned	Percentage	Rating Category
Projected Enro		N/A					Cover Sheet			_	_	—	—
Addition	Date H	A Nu	imber of Flo	oors	Current S		1.0 The School Site			100	70	70%	Satisfactory
Original Buildir	<u>ig</u> 1928 y	es	4				2.0 Structural and M		al Features	200	124	62%	Borderline
Addition	1969 y		4				3.0 Plant Maintainab			100	80	80%	Satisfactory
Gymnasium Ac	dition 2001 y	es	2				4.0 Building Safety a		urity	200	143	72%	Satisfactory
Total						109,879	5.0 Educational Ade			200	147	74%	Satisfactory
*	IA = Ha	andica	apped Acce	ess			6.0 Environment for	Education	<u>on</u>	200	149	75%	Satisfactory
*F	Rating =1 Sa	atisfac	tory				LEED Observations			—	—	—	—
	=2 N	eds F	Repair				Commentary			_	_	—	—
	=3 N	eeds F	Replaceme	nt			Total			1000	713	71%	Satisfactory
*0	Const P/S = Pi	esent	/Scheduled	d Cons	struction		Enhanced Environm	ental Ha	zards Asses	ssment Cost Estin	nates		
FACI	FACILITY ASSESSMENT					Dollar	<u></u>						
	5						C=Under Contract						
					93,351.80 -	Renovation Cost Fac	ctor					109.74%	
B. Roofing	Roofing 3			\$9	14,322.10 -	Cost to Renovate (C	ost Fact					\$20,767,609.70	
	on / Air Conditi	oning		1		\$0.00 -	The Replacement Co			Renovate/Replace	ratio are only p	provided when	this summary is
	al Systems			2	\$1,2	26,269.15 -	requested from a Ma	aster Pla	n.				
	g and Fixtures			3	· ·	35,142.00 -							
F. Window				3	\$6	01,683.75 -							
	e: Foundation			1		\$0.00 -							
	e: Walls and Cl		<u>ys</u>	2	\$1	22,446.00 -							
	e: Floors and R	<u>oofs</u>		1		\$0.00 -							
	Finishes			3	. ,	81,664.77 -							
K. Interior I				3	· ·	14,213.50 -							
	Systems			3		23,034.15 -							
	ncy/Egress Lig	nting		3	\$1	09,879.00 -							
N. Fire Ala				1		\$0.00 -							
	pped Access			2		36,475.80 -							
P. Site Cor				3		95,648.40 -							
	System			3	\$	13,500.00 -							
CR. Water S				1		\$0.00 -							
S. Exterior				3		41,000.00 -							
	ous Material			2		29,960.00 -							
U. Life Safe				3		06,627.20 -							
	urnishings			3	· ·	04,334.50 -							
🛅 W. <u>Technol</u>				3		59,264.00 -							
	ction Continger nstruction Cost	<u>icy /</u>		-	\$3,7	15,559.40 -							
Total					\$18,9	24,375.52							

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District: Nordonia Hills City			County:	Summit Area: 1	Northeastern Ohio (0)	
Name: Nordonia Middle			Contact:	Mr. Bryan Seward	Northeastern Onio (0)	
			Phone:	•			
Address: 73 Leonard Ave Northfield.OH 44067				330-467-0584	Tanu Cabarr		
*			-	•	Tony Schorr		
Bldg. IRN: 27326		L		· · · · · · · · · · · · · · · · · · ·	Annalise Bennett		
	Acreage:		10.00	Suitability Appraisal Summary			
	eaching Statio	ons:	38	Castion	Deinte D	essible Deinte Formed	Deveentere Deting Cotogon
	Classrooms:		35	Section	Points P	ossible Points Earned	Percentage Rating Category
Projected Enrollment N/A			_	Cover Sheet		- —	
	ber of Floors	Current So	quare Feet	1.0 The School Site	10 Features 20		70% Satisfactor 62% Borderline
Original Building 1928 yes	<u>4</u>			2.0 Structural and Mechanical			
Addition 1969 yes	4			3.0 Plant Maintainability	10		80% Satisfactor
Gymnasium Addition 2001 yes	2			4.0 Building Safety and Securi			72% Satisfactor
Total		ı	<u>109,879</u>	5.0 Educational Adequacy	20		74% Satisfactor
	bed Access			6.0 Environment for Education	<u> </u>	00 149	75% Satisfactor
*Rating =1 Satisfactor	-			LEED Observations	-	- —	
=2 Needs Re				Commentary		- —	
=3 Needs Re				Total	10		71% Satisfactor
*Const P/S = Present/So	cheduled Cons	struction		Enhanced Environmental Haza	ards Assessment C	ost Estimates	
FACILITY ASSESSMENT	Detine		Dollar	C=Under Contract			
Cost Set: 2021	Rating						
A. <u>Heating System</u>	3		8,376.40 -	Renovation Cost Factor			109.74%
B. <u>Roofing</u> C. Ventilation / Air Conditioning	3	\$294	4,446.50 -	Cost to Renovate (Cost Factor	applied)	<u> </u>	\$8,891,170.6
	1	¢50	\$0.00 -	The Replacement Cost Per SF requested from a Master Plan.	- and the Renovate	Replace ratio are only pr	rovided when this summary is
D. Electrical Systems	2		4,443.70 -	requested norm a master r ram.			
E. <u>Plumbing and Fixtures</u>	3	· · ·	3,974.00 - 9,738.20 -				
G. Structure: Foundation	1	\$34	,				
		¢0.	\$0.00 - 1,250.00 -				
H. <u>Structure: Walls and Chimneys</u> L. <u>Structure: Floors and Roofs</u>	1	\$3	\$0.00 -				
J. General Finishes	3	¢1.05/	3,597.66 -				
	3		-				
	3	-	5,633.00 -				
L. <u>Security Systems</u> M. <u>Emergency/Egress Lighting</u>	3		5,105.70 - 5,482.00 -				
 M. Emergency/Egress Lighting N. Fire Alarm 	3	± – ⇒4:	5,482.00 - \$0.00 -				
C. Handicapped Access	2	¢10	\$0.00 - 9,596.40 -				
P. Site Condition	3	· · ·	,				
Q. Sewage System	3		0,333.50 -				
	3	\$1	3,500.00 - \$0.00 -				
Contract R. Water Supply Contract S. Exterior Doors	3	¢1/	\$0.00 - - 0,000.00				
T. Hazardous Material	2	· ·	9,960.00 -				
U. Life Safety	3	· ·	9,960.00 - 8,384.00 -				
V. Loose Furnishings	3	-	0,151.00 -				
W. Technology	3		-				
- X. Construction Contingency /	- 3	-	7,330.00 - 0,730.63 -				
- X. Construction Contingency / Non-Construction Cost	-	φ1,590	0,730.03 -				
Total		\$8.10	2,032.69				
		ψ0,102	_,				

Original Building (1928) Summary

Distant No. 1						0			NI 11 11				
District: Nordonia						County:	Summit		Northeaste	ern Ohio (8)			
Name: Nordonia						Contact:	Mr. Bryan Sewar	b					
Address: 73 Leona						Phone:	330-467-0584	_					
Northfield	,OH 4406	57					red: 2019-09-19	-	Tony Scho				
Bldg. IRN: 27326							ed: 2021-12-08	By:	Annalise B	Bennett			
Current Grades		7-8	Acreage:			10.00	Suitability Appraisal S	ummar	у				
Proposed Grades		N/A	Teaching	g Statio	ons:	38						_	
Current Enrollment		603	Classroo	ms:		35	Section	on		Points Possible	Points Earned	Percentage	Rating Category
Projected Enrollment		N/A					Cover Sheet			—	—	—	-
Addition	Date HA	<u>Nu</u>	mber of Fl	loors	Current S	Square Feet	1.0 The School Site			100	70	70%	Satisfactory
Original Building	1928 ye	s	4			,	2.0 Structural and Me		al Features	200	124	62%	Borderline
Addition	1969 ye	s	4				3.0 Plant Maintainabil			100	80	80%	Satisfactory
Gymnasium Addition	2001 ye	s	2				4.0 Building Safety an		rity	200	143	72%	Satisfactory
<u>Total</u>						<u>109,879</u>	5.0 Educational Adeq			200	147	74%	Satisfactory
*HA	= Ha	ndica	pped Acce	ess			6.0 Environment for E	ducatio	<u>on</u>	200	149	75%	Satisfactory
*Rating	=1 Sa	isfac	tory				LEED Observations			—	—	_	—
	=2 Ne	eds F	Repair				Commentary			_	_	_	_
	=3 Ne	eds F	Replaceme	ent			Total			1000	713	71%	Satisfactory
*Const P	/S = Pre	sent	Scheduled	d Con	struction		Enhanced Environme	<u>ntal Ha</u>	zards Asse	ssment Cost Estir	<u>nates</u>		
FACILITY A		IENT				Dollar							
	Set: 2021			Rating			C=Under Contract						
A. <u>Heating System</u> 3				66,744.80 -	Renovation Cost Factor	or					109.74%		
	B. Roofing 3			\$4	17,303.30 -	Cost to Renovate (Co	st Facto					\$9,578,938.77	
C. Ventilation / Ai		ning		1		\$0.00 -	The Replacement Cos			Renovate/Replace	ratio are only p	rovided when	this summary is
D. Electrical Syste				2		28,673.40 -	requested from a Mas	ter Plai	1.				
E. Plumbing and	Fixtures			3	· ·	39,568.00 -							
F. Windows				3	\$2	51,945.55 -							
G. Structure: Four				1		\$0.00 -							
H. Structure: Wall			<u>ys</u>	2	\$	57,454.00 -							
I. <u>Structure: Floo</u>		ofs		1		\$0.00 -							
J. <u>General Finish</u>				3		32,002.12 -							
K. Interior Lighting				3		18,006.00 -							
L. Security System				3		88,357.40 -							
M. Emergency/Eg	ress Ligh	ting		3	\$	48,924.00 -							
N. <u>Fire Alarm</u>				1	-	\$0.00 -							
O. Handicapped A	Access			2	· ·	36,784.80 -							
P. <u>Site Condition</u>				3	\$	72,629.50 -							
ZQ. Sewage Syste	<u>em</u>			3		\$0.00 -							
R. Water Supply				1		\$0.00 -							
S. Exterior Doors				3	\$	18,500.00 -							
T. <u>Hazardous Ma</u>	aterial			2		\$0.00 -							
U. Life Safety				3	- ·	23,836.80 -							
C Loose Furnishi	ngs			3		69,082.00 -							
🛅 W. <u>Technology</u>				3		45,166.00 -							
- X. Construction C		cy /		-	\$1,7	13,780.09 -							
Non-Construct	ion Cost					00 757 70							
Total					\$8,7	28,757.76							

Addition (1969) Summary

Gymnasium Addition (2	2001) Sur	nmary
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District	Nie wele wie 11						0	Quantum it	A	. N				
District: Name:			.y				County: Contact:	Summit		nonneasu	ern Ohio (8)			
	Nordonia M							Mr. Bryan Sewar	a					
Address	: 73 Leonard	-	207				Phone:	330-467-0584	D	Tauru Oak				
	Northfield,C)H 44(J67			I	•	red: 2019-09-19	-	Tony Scho				
Bidg. IRI								ed: 2021-12-08	By:	Annalise E	Bennett			
Current G			7-8	Acreage:			10.00	Suitability Appraisal S	Summar	У				
Proposed			N/A	Teaching		ons:	38	Secti			Deinte Dessible	Deinte Ferned	Deveentere	Dating Catagony
	nrollment		603	Classroo	ms:		35		on		Points Possible	Points Earned	Percentage	Rating Category
· ·	I Enrollment	_ 1	N/A		1			Cover Sheet						
Addition					loors	Current S	Square Feet	1.0 The School Site 2.0 Structural and Me	chania		100	70 124	70% 62%	Satisfactory
Original E	Building	1928	-	4						a reatures				Borderline
Addition		1969	·	4				3.0 Plant Maintainabi			100	80	80% 72%	Satisfactory
-	ium Addition	2001	yes	2			15,473	4.0 Building Safety a	<u>10 Sect</u>	irity	200	143		Satisfactory
<u>Total</u>		1 1					<u>109,879</u>	5.0 Educational Adec			200	147	74%	Satisfactory
	*HA	-		pped Acce	ess			6.0 Environment for E	Jucatio	<u>)11</u>	200	149	75%	Satisfactory
	*Rating		atisfac	,				LEED Observations			_	_	—	-
			eeds F					Commentary						
				Replaceme				Total			1000	713	71%	Satisfactory
	*Const P/S	_			d Cons	struction		Enhanced Environme	ental Ha	zards Asse	essment Cost Estim	lates		
	FACILITY AS				Detine		Dollar	C=Under Contract						
	Cost Se	t: 202	I		Rating									
	A. <u>Heating System</u> 3 B. Boofing 3			· ·	98,230.60 -	Renovation Cost Fact	tor					109.74%		
	B. Roofing 3 C. Ventilation / Air Conditioning 1			\$20	02,572.30 -	Cost to Renovate (Co						\$2,297,500.26		
			ioning		1		\$0.00 -	The Replacement Co requested from a Mas			Renovate/Replace	ratio are only pi	rovided when	this summary is
	ectrical System				2		13,152.05 -	requesteu nom a mas	SIGI FIAI	1.				
	umbing and Fix	xtures	-		3 3	\$3	31,600.00 -							
	indows				3 1		\$0.00 -							
_	ructure: Found		la luca ca a s				\$0.00 -							
	ructure: Walls			<u>/S</u>	2	\$	33,742.00 -							
	ructure: Floors		10015		1 3		+ \$0.00 - + \$0.00 -							
	eneral Finishes	<u>i</u>					,							
	erior Lighting	_			3	· ·	0,574.50 -							
	curity System	_	latir -		3		59,571.05 -	1						
	nergency/Egre	SS LIG	nung		3	\$	15,473.00 -	1						
	e Alarm				1		+ 0.00	{						
	Indicapped Ac	Cess			2		90,094.60 -	1						
	e Condition					\$	12,685.40 -	4						
	wage System	<u> </u>			3 1		\$0.00 -	1						
	ater Supply						\$0.00 -	1						
	terior Doors				3	\$	12,500.00 -	{						
	zardous Mate	erial			2		\$0.00 -	1						
	<u>e Safety</u>				3		34,406.40 -	{						
	ose Furnishing	<u>js</u>			3		35,101.50 -	-						
	chnology				3		96,768.00 -	1						
	onstruction Con on-Construction				-	\$41	11,048.69 -							
Total		. 003	2			\$2,09	93,585.08	1						
						φ=,00								

A. Heating System

Description: There are (2) separate heating water boiler systems in the building. Three Weil-McLain boilers, each with an input rating of 1040 MBH, are located in the Lower Level Mechanical room in the original 1928 portion of the building. These were installed in 1992 and are in fair condition. This system serves the original air handling unit for the 1928 building, plus unit ventilators, convectors, cabinet unit heaters, etc. in the 1928 building and the 1969 west classroom addition. The second boiler system consists of (3) Burnham boilers, each with an input rating of 594 MBH, located in the First Floor mechanical room of the 1969 east addition. These were installed around 2001 and are in fair condition. This system serves the air handling units and perimeter heat for the 1969 east addition. Temperature controls are electronic DDC throughout, but outdated. The 15 CFM per person fresh air requirement of the Ohio Mechanical Code and ASHRAE 62.1 is generally satisfied. 11/29/21 update: Original building is also fed from 2 RTU's located behind the Media Center (old gym) on the roof, and 1969 Addition is partially fed from 2 RTU's. Building is also fed from 2 gas fired RTU's located on the 2001 addition. 2001 additions already have RTU's with ductwork and space to run additional ductwork.

Rating:

3 Needs Replacement

Recommendations: Provide new heating and air handling systems to meet OSDM guidelines.

ltem	Cost	Unit	Whole	Original Building	Addition	Gymnasium	Sum	Comments
			Building	(1928)	(1969)	Addition (2001)		
				45,482 ft²	48,924 ft ²	15,473 ft ²		
HVAC System	\$32.20	sq.ft. (of entire		Required	Required	Required	\$3,538,103.80	(includes demo of existing system and reconfiguration of
Replacement:		building						piping layout and new controls, air conditioning)
		addition)						
Convert To	\$8.00	sq.ft. (of entire		Required	Required		\$755,248.00	(includes costs for vert. & horz. chases, cut openings,
Ducted System		building		-				soffits, etc. Must be used in addition to HVAC System
		addition)						Replacement if the existing HVAC system is non-ducted)
Sum:			\$4,293,351.80	\$1,828,376.40	\$1,966,744.80	\$498,230.60		



Heating water boilers



Heating water pumps

B. Roofing

Description: The roof over the overall facility is a ballasted membrane system that was installed in over 7 years old, and is in fair condition. There are District reports of current leaking. Signs of past leaking were observed during the physical assessment. Access to the roof was gained by access ladder that is in good condition. Fall safety protection cages are not provided. There were no observations of standing water on the roof. Metal cap flashings are in good condition. Roof storm drainage is addressed through a system of roof drains, which are properly located, and in good condition. The roof is not equipped with overflow roof drains though they are needed on this building. No problems requiring attention were encountered with any roof penetrations. Additional roof insulation is required to meet LEED Silver Certification energy requirements. 12/8/21 update: Amounts for membrane and roof insulation were updated according to most recent evaluation.

Rating: 3 Needs Replacement

Recommendations: The roof over the overall facility requires replacement to meet Ohio School Design Manual guidelines for age of system and due to condition. Also provide roof overflow drains. Provide additional insulation to meet LEED Silver Certification energy requirements. 12/8/21 update: Replace coping & fascia. Install roof ladders for additional roof access, and install safety cages on existing ladders.

ltem	Cost	Unit	Whole Building	Original Building (1928)	Addition (1969)	(2001)	Sum	Comments
				45,482 ft ²	48,924 ft ²	15,473 ft ²		
Membrane (all types / fully	\$10.00	sq.ft.		17,189 Required	25,439	13,097 Required	\$557,250.00	(unless under 10,000 sq.ft.)
adhered):		(Qty)			Required			
Repair/replace cap flashing and coping:	\$18.40	ln.ft.		698 Required		546 Required	\$22,889.60	
Overflow Roof Drains and Piping:	\$3,000.00	each		4 Required	4 Required		\$24,000.00	
Roof Insulation:	\$4.70	sq.ft. (Qty)		17,189 Required	25,439 Required	13,097 Required		(tapered insulation for limited area use to correct ponding)
Roof Access Ladder with Fall Protection Cage:	\$100.00	In.ft.		68 Required			\$6,800.00	(remove and replace)
Roof Access, Ladder & Fall Protection Cage:	\$3,850.00	each		2 Required				(provide when no roof access currently exists)
Other: Coping/Fascia replacement	\$25.00	ln.ft.		97 Required	1,254 Required		\$33,775.00	Combined coping/fascia
Sum:			\$914,322.10	\$294,446.50	\$417,303.30	\$202,572.30		



Ballasted Membrane Roofing



Ballasted Membrane Roofing

C. Ventilation / Air Conditioning

Description: The ventilation and air conditioning throughout the building is accomplished through various systems. The 1928, 3-story classrooms and offices are served by an original, built-up indoor AHU with heating water and DX coils. This is a ducted system with zone control dampers at individual classrooms. The AHU is original; however, the air-cooled condensing unit is about 20 years old. Equipment is in poor condition. The 1969 west classroom addition is served by self-contained heating & cooling unit ventilators in each room. These were installed in 2001 and are in fair condition. The cafeteria and second floor classrooms in the 1969 east addition are served by (2) indoor air-handling units with condensing units on the roof. This equipment is in fair condition. The 1969 gymnasium is served by a rooftop HVAC unit. The age of the unit was not determined, but it was installed around 2001 and is in fair condition. The Media Center is served by a rooftop HVAC unit, installed in 2001 and in good condition. RTU's serving the 2001 large gymnasium and locker rooms are in good condition. Outdoor air requirements are met through the air-handling units, RTU's and unit ventilators.

Rating: 1 Satisfactory

Recommendations: Due to the age of the HVAC equipment, provide a new air conditioning system throughout that meets OSDM design guidelines. Cost for replacement is included in A. Heating System, above.

ltem	Cost	Unit	Whole Building	Original Building (1928	B)Addition (1969)	Gymnasium Addition (2001)Sum	Comments
			-	45,482 ft ²	48,924 ft ²	15,473 ft ²		
Sum	:		\$0.00	\$0.00	\$0.00	\$0.00		



Rooftop HVAC unit for gym

Classroom unit ventilator

D. Electrical Systems

Description:The school has (2) separate electrical services, with (2) pad-mounted transformers on the northeast side of the 1928 building. The transformers are owned by Nordonia Hills City School District. (2) main distribution panels, one at 480/277 volts, 1600 amps and the other at 208/120 volts, 1600 amps, are located in the basement of the 1928 building. The 480 volt service generally serves the air conditioning equipment and the 208-volt service serves the general power and lighting throughout the entire building. The electrical systems were upgraded in 2001 and appear to be in good condition. Many of the branch circuit panels were also replaced in 2001. Classrooms have an adequate number of general-purpose receptacles. The corridors are equipped with adequate receptacles for servicing and there are GFI protected exterior outlets around the perimeter of the building. The school is not equipped with an emergency generator. Adequate lightning protection safeguards are not provided.Rating:2 Needs RepairRecommendations:The (2) electrical services are adequate for the existing building; however, modifications to the distribution network will be necessary to accommodate HVAC renovations. An emergency generator will need to be provided, with cost incorporated in Item U: Life Safety. 12/8/21

ltem	Cost		Building	Original Building (1928) 45.482 ft²	Addition (1969) 48.924 ft ²	Gymnasium Addition (2001) 15.473 ft ²	Sum	Comments
Lightning Protection		sq.ft. (of entire building addition)		Required	Required	Required	\$65,927.40	
Grounding		sq.ft. (of entire building addition)		Required	Required	Required	\$27,469.75	
Other: Replace branch circuit panels and distribution network		sq.ft. (of entire building addition)		Required	Required		\$1,132,872.00	Electrical Upgrades
Sum:			\$1,226,269.15	\$584,443.70	\$628,673.40	\$13,152.05		

update: Replacement of branch circuit panels and distribution network not needed in 2001 addition.



208/120-volt main switchgear



480-volt & 208 volt

E. Plumbing and Fixtures

Description: The school plumbing system meets current requirements for plumbing fixtures and backflow prevention. There is a 3" domestic water service located in a storage room adjacent to the locker rooms. There is a reduced pressure zone backflow preventer (RPZ-BFP) on the domestic service and a second RPZ-BFP on the limited area sprinkler system serving storage and boiler rooms. Water piping appears to be copper and sanitary piping is predominantly cast iron. The plumbing system was upgraded in 2001 and all fixtures are in good condition, but don't comply with OSDM guidelines. There is an A.O. Smith atmospheric gas-fired domestic water heater in the 1928 boiler room that serves fixtures in the 1928 building and the 1969 west addition. This water heater is located in the 1928 basement boiler room, was installed in May 2019, and is in good condition. There is another water heating boiler located in the east 1969 boiler room, with a storage tank located in a mechanical room on the second floor, above. This serves the toilet rooms and locker rooms. The boiler is in fair condition and the storage tank is in good condition. A third water heater is located in the 1969 second mechanical room and serves the kitchen. The age of this heater wasn't determined, but it is in good condition. There are (6) group restrooms for girls, (6) group restrooms for boys, (4) staff restrooms, (1) restroom in the kitchen, and restrooms with a shower in both the boys' and girl's locker rooms. There is an assortment of both floor-mounted and wall-mounted water closets; some with manual and some with automatic flush valves. Lavatories and wash fountains are wall-mounted, with either manual or automatic faucets. The plumbing fixtures are in good condition and were upgraded at the time of the 2001 addition. The kitchen grease waste interceptor is regularly serviced.

Rating: 3 Needs Replacement

Recommendations:

ions: Replace the cast iron sanitary piping system and supply system piping. Replace plumbing fixtures with wall-hung, low water consumption fixtures that comply with OSDM guidelines. 12/8/21 update: Domestic supply and sanitary waste piping not needed for 2001 addition.

ltem	Cost	Unit	Whole Building	Original Building	Addition (1969)	Gymnasium Addition	Sum	Comments
				(1928)	48,924 ft ²	(2001)		
				45,482 ft ²		15,473 ft ²		
Domestic Supply	\$3.50	sq.ft. (of entire building		Required	Required		\$330,421.00	(remove /
Piping:		addition)						replace)
Sanitary Waste Piping:	\$3.50	sq.ft. (of entire building		Required	Required		\$330,421.00	(remove /
		addition)						replace)
Domestic Water Heater:	\$5,100.00	per unit		4 Required			\$20,400.00	(remove /
								replace)
Toilet:	\$3,800.00	unit		4 Required	11 Required	4 Required	\$72,200.00	(new)
Urinal:	\$3,800.00	unit			6 Required	3 Required	\$34,200.00	(new)
Sink:	\$2,500.00	unit		4 Required	13 Required	2 Required	\$47,500.00	(new)
Sum:			\$835,142.00	\$363,974.00	\$439,568.00	\$31,600.00		



wall-hung urinals



domestic water heater

F. Windows

Description: The overall facility is equipped with thermally broken aluminum windows with double glazed insulated glazing window system which was installed in 2000, and is in good condition. Window system seals are in fair condition, with minimal air and water infiltration being experienced. Window system hardware is in fair condition. The window system features integral blinds, which are in fair condition.

Rating: 3 Needs Replacement

Recommendations:

Provide a lump sum dollar amount to replace any faulty hardware. 12/8/21: District requested replacing all exterior windows 9/16/21.

ltem	Cost	Unit	Whole Building	(1928)	Addition (1969) 48,924 ft ²	Gymnasium Addition (2001) 15,473 ft ²	Sum	Comments
Insulated	\$101.55	sq.ft.		3,444 Required	2,481		\$601,683.75	(includes integral blinds and removal of existing
Glass/Panels:		(Qty)			Required			windows)
Sum:			\$601,683.75	\$349,738.20	\$251,945.55	\$0.00		



Close Up of a Typical Window



Typical Windows

G. Structure: Foundation

Description:	The overall facility is equipped with concrete masonry unit foundation walls on concrete footings, which displayed no locations of significant differential settlement, cracking, or leaking, and are in good condition. 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.

ltem	Cost	Unit	Whole Building	Original Building (1928)	Addition (1969)	Gymnasium Addition (2001)	Sum	Comments
			-	45,482 ft ²	48,924 ft ²	15,473 ft ²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		

H. Structure: Walls and Chimneys

Description: The overall facility has a brick veneer on a masonry bearing wall system which displayed very minor locations of deterioration and is in good condition. The exterior masonry appears to have appropriately spaced and adequately caulked control joints in good condition. The exterior masonry has not been cleaned and sealed in recent years, and shows minor evidence of mortar deterioration. Interior walls are concrete masonry units and glazed block and are in good condition.

Rating: 2 Needs Repair

Recommendations: Provide tuckpointing in all areas of mortar deterioration as required through the overall facility. Provide masonry cleaning, sealing, caulking as required through the overall facility. 12/8/21 update: EIFS coating needed for 1969 and 2001 additions.

Item	Cost	Unit	Whole Building	Original Building (1928)	Addition (1969)	Gymnasium Addition (2001)	Sum	Comments
				45,482 ft ²	48,924 ft²	15,473 ft ²		
Tuckpointing:	\$7.50	sq.ft. (Qty)		1,000 Required	1,000 Required	200 Required	\$16,500.00	(wall surface)
Exterior Masonry Cleaning:	\$1.50	sq.ft. (Qty)		8,000 Required	10,000 Required	4,000 Required	\$33,000.00	(wall surface)
Exterior Masonry Sealing:	\$1.00	sq.ft. (Qty)		8,000 Required	10,000 Required	4,000 Required	\$22,000.00	(wall surface)
Exterior Caulking:	\$7.50	ln.ft.		500 Required	500 Required	200 Required	\$9,000.00	(removing and replacing)
Other: EIFS Coating	\$6.00	sq.ft. (Qty)			3,534 Required	3,457 Required	\$41,946.00	Lotoson STO product
Sum:			\$122,446.00	\$31,250.00	\$57,454.00	\$33,742.00		



Parapet Masonry Needing Repair

Northwest Side Masonry

I. Structure: Floors and Roofs

Description: The floor construction of the base floor of the overall facility is concrete slab on grade construction, and is in good condition. There is a non-accessible crawl space which is under the 1928 section of the facility. The floor construction of the intermediate floors of the overall facility is metal form deck on steel joist, cast-in-place concrete construction, and is in good condition. Ceiling to structural desk spaces are insufficient to accommodate HVAC, electrical, and plumbing scopes of work in required renovations. The roof construction of the overall facility is steel and cast-in-place concrete construction, and is in good condition.

Rating: 1 Satisfactory

Recommendations:	Existing conditions require no renovation or replacement at the present time.
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Item	Cost	Unit	Whole	Building	Original	Building	(1928)	Addition	(1969)	Gymnasium	Addition	(2001)	Sum	Comments
					45,482	ft ²		48,924 ft	2	15,473 ft ²				
Sum	:		\$0.00		\$0.00			\$0.00		\$0.00				



Main Gym Steel



Auxiliary Gym Steel

J. General Finishes

Description: The overall facility features conventionally partitioned Classrooms with VCT/VAT flooring, suspended ceilings, as well as painted wall finishes, and they are in fair condition. The overall facility has Corridors with terrazzo and VCT flooring, plaster and suspended ceilings, as well as painted wall finishes, and they are in fair condition. Classroom casework in the overall facility is wood construction with plastic laminate tops, is adequately provided, and in fair condition. The Art program is equipped with a kiln in good condition and existing kiln ventilation is adequate. The facility is equipped with wood non-louvered interior doors that are flush mounted and partially recessed with and without proper ADA hardware and clearances, and in fair condition. The Gymnasium spaces have wood flooring, open ceilings, as well as painted wall finishes, and they are in good condition. Gymnasium telescoping stands are plastic type construction in fair condition. Gymnasium basketball backboards are electrically operated, and are in good conditions. The Media Center has carpet flooring, suspended ceilings, as well as painted wall finishes, and they are in good condition. Student Dining has VCT/VAT flooring, suspended ceilings, as well as painted wall finishes, and they are in fair condition. The Kitchen is full service is undersized based on current enrollment, and the existing Kitchen equipment, 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.

Rating: 3 Needs Replacement

Recommendations:

Provide a partial replacement of finishes and casework due to installation of systems outlined in Items A, C, D, K, L, M, N, T, U. 12/8/21 update: Gym bleachers need replacement. Add wall cavity insulation to original building and 1969 addition.

ltem	Cost	Unit		Original Building		Gymnasium	Sum	Comments
			Building	(1928)	(1969)	Addition (2001)		
				45,482 ft²	48,924 ft ²	15,473 ft ²		
Complete Replacement	\$19.63	sq.ft. (of entire		Required	Required	Required	\$2,156,924.77	(middle, per building area, with removal of existing)
of Finishes and		building						
Casework (Middle):		addition)						
Door, Frame, and	\$1,300.00	each		40 Required	40 Required	20 Required	\$130,000.00	(non-ADA)
Hardware:								
Bleacher Replacement	\$110.00	per seat				603 Required	\$66,330.00	(based on current enrollment)
Additional Wall	\$6.00	sq.ft. (Qty)		18,131 Required	16,104		\$205,410.00	(includes the furring out of the existing walls,
Insulation					Required			insulation and abuse resistant GWB)
Total Kitchen Equipment	\$190.00	sq.ft. (Qty)			1,700		\$323,000.00	(square footage based upon only existing area of
Replacement:					Required			food preparation, serving, kitchen storage areas
-								and walk-ins. Includes demolition and removal of
								existing kitchen equipment)
Sum:			\$2,881,664.77	\$1,053,597.66	\$1,432,002.12	\$396,064.99		



Laboratory Casework



Classroom/Lab Casework

K. Interior Lighting

Description:The lighting throughout is a mix of 2x4 lay-in and surface or pendant-mounted fluorescent fixtures. The last lighting upgrade occurred in 2001.
Classrooms and the Media Center are generally dual-level fixtures. Both gymnasiums have pendant-mounted, high-bay fixtures. Lighting levels
are as follows: Classrooms 25-43 foot-candles, Media Center 35-40 foot-candles, Corridors 15-20 foot-candles, Offices 37 foot-candles, Cafeteria
31 foot-candles, and Gymnasiums 18-24 foot-candles.Rating:3 Needs Replacement

Recommendations: Completely replace the lighting due to the installation of a fire suppression system. Utilize LED lamps throughout to provide longer life and reduced energy consumption.

Item	Cost Unit	Whole	Original Building	Addition	Gymnasium Addition	Sum	Comments
		Building	(1928)	(1969)	(2001)		
			45,482 ft ²	48,924 ft ²	15,473 ft ²		
Complete Building Lighting	\$6.50sq.ft. (of entire	e building	Required	Required	Required	\$714,213.50	Includes demo of existing
Replacement	addition)	-		-			fixtures
Sum:		\$714,213.50	\$295,633.00	\$318,006.00	\$100,574.50		



Gymnasium high-bay lighting

Corridor lighting

L. Security Systems

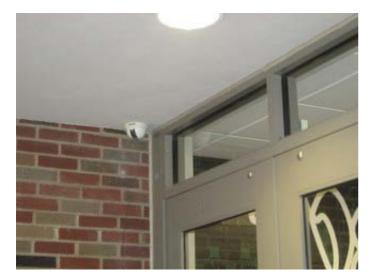
Description: The security system is comprised of indoor cameras. Cameras were observed in the main vestibule, in the main Lobby and 1st floor corridor, and in the vestibules of all exterior entrances. There were no motion detectors in the corridors. All exterior doors were locked, and access into the building by visitors was restricted to entry through the front vestibule. There is no central door monitoring; however, several doors have local door release controls with card access. Two-way communication between the central office and classrooms is through the phone system, and there is a public address system in the school. Exterior lighting consists of ground-mounted fixtures around the building and building-mounted fixtures at exterior doors.

Rating: 3 Needs Replacement

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Recommendations:
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ns: Provide new security system to include cameras, motion sensors, door controls and keypads, and video storage. The new security system should fully comply with OSDM guidelines. Exterior lighting should meet OSDM guidelines.

ltem	Cost	Unit	Building	Original Building (1928) 45.482 ft²	Addition (1969) 48.924 ft ²	Gymnasium Addition (2001) 15,473 ft ²	Sum	Comments
Security System:		sq.ft. (of entire building addition)		Required	Required	· · ·		(complete, area of building)
Exterior Site Lighting:		sq.ft. (of entire building addition)		Required	Required	Required		(complete, area of building)
Sum:		• •	\$423,034.15	\$175,105.70	\$188,357.40	\$59,571.05		



Main vestibule camera



Camera in corridor

M. Emergency/Egress Lighting

Description: The building utilizes exit signs with battery back-up at all exit doors and in interior corridors. Selected corridor recessed light fixtures with battery back-up, are utilized for emergency egress lighting, supplemented by 2-lamp wall or ceiling type fixtures.

Rating: 3 Needs Replacement

Recommendations:

The emergency egress lighting needs to meet OSDM guidelines. All fixtures should be LED. Circuit new emergency egress fixtures, as well as new exit signs, from an emergency generator.

Item	Cost	Unit	Whole Building	Original Building (1928)	Addition (1969)	Gymnasium Addition (2001)	Sum	Comments
				45,482 ft ²	48,924 ft ²	15,473 ft ²		
Emergency/Egress	\$1.00	sq.ft. (of entire building		Required	Required	Required	\$109,879.00	(complete, area of
Lighting:		addition)						building)
Sum:			\$109,879.00	\$45,482.00	\$48,924.00	\$15,473.00		



Typical exit sign



Exit sign in gymnasium

N. Fire Alarm

Description:The school has a zoned general fire alarm system manufactured by Edwards Systems Technologies (EST), consisting of combination
horn/strobes in the corridors and gymnasiums and manual pull stations at all exits and in the gyms and locker rooms. No fire alarm devices were
observed in the classrooms or in the toilet rooms, and there were no smoke detectors in the corridor. The fire alarm system did also monitor the
limited area sprinkler system valves and flow. Fire alarm devices appear to be in good condition. 11/29/21 update: All new panels/devices per
current code and CO detectors were installed in 2015.Rating:1 SatisfactoryRecommendations:The fire alarm system should be replaced with a fully addressable system that utilizes voice commands. Provide speaker/strobes in classrooms
and strobes in all toilet rooms. Provide smoke detectors in corridors and tamper/flow switches to monitor the new fire suppression system. Duct
smoke detectors shall be provided for all new air-handling systems, where required by Code. 11/29/21 update: Current system is up to code, was
replaced in 2015. No changes needed.

ltem	CostL	JnitWhole	BuildingOriginal	Building (1928)	Addition (19	969)G	ymnasium	Addition	(2001)	Sum	Comments
			45,482 f	t²	48,924 ft ²	15	5,473 ft ²				
Sum:		\$0.00	\$0.00		\$0.00	\$C	0.00				



F.A. pull station



Main EST fire alarm panel

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 not equipped with ADA hardware. The main entry is equipped with an ADA power assist door. On the interior of the building, space allowances and reach ranges are mostly compliant. There is an accessible route through the building does not include protruding objects. Ground and floor surfaces are compliant. Ramps and stairs do meet all ADA requirements. Elevation changes within the overall facility are facilitated by non-compliant stairwells in fair condition. Special provisions for floor level changes in this 3 story structure have been appropriately addressed by a compliant elevator. Some interior doors are recessed or partially recessed. These are also doors that open entirely into very wide corridors, and are not provided with ADA-compliant hardware. A sufficient number of ADA restroom fixtures are provided. Older ADA signage is provided on the interior and the exterior of the building.
Rating:	2 Needs Repair

Rating:

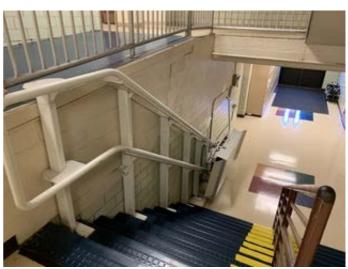
Recommendations:

Provide ADA-compliant signage, power assist door opener, electric water coolers, toilets, sinks, urinals, toilet partitions, toilet accessories, door and frames, door hardware in the overall facility to facilitate the school's meeting of ADA requirements.

ltem	Cost	Unit	Building	(1928)	(1969)	Gymnasium Addition (2001) 15.473 ft²	Sum	Comments
Signage:		sq.ft. (of entire building addition)		-,	- / -	Required	\$21,975.80	(per building area)
Electric Water Coolers	\$3,000.00	unit		3 Required	2 Required	2 Required	\$21,000.00	(new double ADA)
Toilet/Urinals/Sinks:	\$3,800.00	unit		5 Required	5 Required	5 Required	\$57,000.00	(new ADA)
Toilet Partitions:	\$1,000.00	stall		2 Required	2 Required	2 Required	\$6,000.00	(ADA - grab bars, accessories included)
ADA Assist Door & Frame:	\$7,500.00	unit		1 Required			\$7,500.00	(openers, electrical, patching, etc)
Replace Doors:	\$5,000.00	leaf		12 Required	20 Required	12 Required		(rework narrow opening to provide 3070 wood door, HM frame, door/light, includes hardware)
Provide ADA Shower:	\$3,000.00	each		1 Required				(includes fixtures, walls, floor drain, and supply line of an existing locker room)
Sum:			\$336,475.80	\$109,596.40	\$136,784.80	\$90,094.60		



Elevator



Chair Lift

P. Site Condition

Description:

The site is sloped so that the east side is lower than the west and the north is lower than the south. The site is located in a small-town commercial setting with moderate tree and shrub landscaping around its property lines. The site is bordered by a heavily travelled city street, residences, and businesses. Multiple entrances onto the site facilitate proper separation of bus & other vehicular traffic, & one-way bus traffic is provided. There is a curbside bus loading & unloading zone in front of the school which is separated from other vehicular traffic. It should be noted, however, that the bus/parent drop off traffic created by this school and Northfield Elementary down the street is constantly violating fire code and causing traffic jams. The west drive also is only wide enough for one vehicle to fit through at a time and experiences water and ice accumulation along the side of the building in the winter or during heavy storms. Parking is facilitated by multiple asphalt parking lots in fair condition, containing 82 spaces which provides adequate parking for staff and visitors, but not enough handicapped parking spots are being provided. The site & parking lot drainage design, consisting of sheet flow, catch basins, and storm sewers provides adequate excavation of storm water in most areas, although the addition of a catch basin by door 20 would help alleviate ponding at the door. Concrete & asphalt curb is used around the site. The concrete curb is in good condition, but the asphalt curb is in need of replacement. Both are appropriately located. Trash pick-up and service drive pavement is in good condition & is equipped with a concrete pad area for dumpsters. One problem to note however is that the ADA ramp on the north end of the building was blocked by a dumpster as the dumpster pad was also the entrance for the ramp. This ramp is in need of replacement as well as it does not meet ADA grading requirements. The school is not equipped with a conventional loading dock. Concrete & asphalt sidewalks are properly sloped in most areas, the exception being the asphalt sidewalks at the north west area of the building where slopes are around 18-21%. They are located to provide adequate & logical flow of pedestrian traffic, and are in fair condition. Several of the stairs outside the school are showing cracks and their handrails, if they have any, are bent and rusting. Site fencing is showing ware, and could use some repairs. This site does not offer any playground equipment. The athletic facilities were not included in the assessment area. Some site features such as the athletic facilities provide space for outdoor instruction, other options are lacking however due to a lack of available space. 12/8/21 update: Asphalt is in bad condition and in need of total removal and replacement.

Rating: 3 Ne

Recommendations:

3 Needs Replacement

dations: Much of the parking lot and drive that access the rear of the building is in need of repair. The side of the drive that runs along the building is experiencing ponding/ice buildup and the pavement is cracking. The asphalt sidewalks and ADA ramps are also not compliant as they are too steep. Several doors on the outside of the building need to have sidewalk access added for exiting. Exterior stairs are in need of repair or replacement. Not enough handicapped parking spaces are provided on the site. Parent and Bus drop off should be revised as traffic build up from current setup violates fire code. It may help to provide a new bus loop that removes bus traffic from the road. A new storm structure would help to alleviate ponding/ice buildup that occurs around door 20. 12/8/21: Remove/replace all asphalt.

Item	Cost	Unit	Whole	Original	Addition	Gymnasium	Sum	Comments
item	COSI			Building (1928)		Addition (2001)	Sum	Comments
						15,473 ft ²		
New Asphalt Paving (heavy duty):	¢27.80	sq. yard		2,934 Required		0 Required	\$81,565.20	
							+ · · ·	
New Asphalt Paving (light duty):		sq. yard		2,704 Required		0 Required	\$69,763.20	
Bus Drop-Off for Middle	\$110.00					64 Required		(Number of students should be rounded up to
		student			Required			the nearest 100. \$5500 per bus; 40 students per
								bus; 80% of middle school students riding)
Concrete Curb:	\$22.30	In.tt.				46 Required	\$11,150.00	(new)
					Required			
Concrete Sidewalk:	\$5.80	•		1,970 Required		457 Required	\$29,000.00	(5 inch exterior slab)
		(Qty)			Required			
Replace Concrete Steps:	\$32.00	sq.ft.		73 Required	95 Required	17 Required	\$5,920.00	
		(Qty)						
Base Sitework Allowance for	\$50,000.00	allowance		Required			\$50,000.00	Include this and one of the next two. (Applies for
Unforeseen Circumstances								whole building, so only one addition should have
								this item)
Sitework Allowance for Unforeseen	\$150,000.00	allowance		Required			\$150,000.00	Include this one or the previous. (Applies for
Circumstances for buildings								whole building, so only one addition should have
100,000 SF or larger								this item)
Other: 12" Storm Pipe	\$50.00	ln.ft.		49 Required	64 Required	12 Required	\$6,250.00	12" Pipe for Storm Sewer
Other: 6' Chain Link Fence	\$15.00	ln.ft.		236 Required	309	55 Required	\$9,000.00	New Chain Link Fencing
					Required			3
Other: ADA Parking Spot	\$1,500.00	each		1 Required	1 Required		\$3,000.00	New ADA Parking Spot
Other: Site ADA Ramp	\$1,000.00			1 Required				New ADA Ramp
Other: Storm Catch Basin	\$2,000.00			1 Required				New Catch Basin Structure for Storm Sewer
Sum:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		\$495,648.40		\$72,629.50	\$12.685.40	. ,	
			+	+			1	







Non-compliant ADA Ramp

Q. Sewage System

Description: The building sanitary sewer drains to a municipal sewage system. There are reportedly no current issues with this system; however, newer sections are almost 20 years old and some of the system dates to the original 1928 buildings.

Rating: 3 Needs Replacement

Recommendations: Provide new building sewer to the municipal main. Provide new sanitary piping from all toilet fixtures, throughout the building.

ltem	Cost	Unit	Whole Building	Original Building (1928)	Addition (1969)	Gymnasium Addition (2001)	Sum	Comments
				45,482 ft ²	48,924 ft ²	15,473 ft ²		
Sewage Main:	\$45.00	ln.ft.		300 Required			\$13,500.00	(include excavation and backfilling)
Sum:		67	\$13,500.00	\$13,500.00	\$0.00	\$0.00		

R. Water Supply

Description:The water supply originates from the municipal water system, which reportedly provides adequate flow capacity and pressure for the needs of the
school. This service was relocated with the 2001 gymnasium/locker room addition and is in good condition. The water service was in a locked,
fenced enclosure adjacent to the locker rooms and not entirely accessible. It appeared to be 3". The Limited Area Sprinkler System (LASS) taps
off of the service upstream of the domestic water BFP. A separate BFP is provided for the LASSRating:1 SatisfactoryRecommendations:A larger combination domestic water and fire suppression service will be necessary to accommodate a fully sprinklered building. Provide 200 I.f.

of water main replacement from Leonard Avenue to the building. Pricing is included in Item U - Life Safety

ltem	CostL	JnitWho	ole Building	Original	Building	(1928)	Addition	(1969)	Gymnasium	Addition	(2001)	Sum	Comments
				45,482	ft ²		48,924 ft	2	15,473 ft ²				
Sum	:	\$0.0	00	\$0.00			\$0.00		\$0.00				



Domestic water BFP

Main water service

S. Exterior Doors

- Description: Typical exterior doors in the overall facility are aluminum and steel construction, installed on aluminum hollow metal frames, and in fair construction.
- Rating: 3 Needs Replacement

Recommendations: Replace exterior doors in the overall facility as noted below due to age and condition.

Item	Cost	Unit	Whole Building	Original Building	Addition (1969)	Gymnasium Addition	Sum	Comments
				(1928)	48,924 ft ²	(2001)		
				45,482 ft ²		15,473 ft ²		
Door Leaf/Frame and	\$2,500.00	per leaf		4 Required	6 Required	5 Required	\$37,500.00	(includes removal of existing)
Hardware:		ſ			-			
Overhead doors and hardware:	\$3,500.00	per leaf			1 Required		\$3,500.00	(8 x 10 sectional, manual
		ſ			-			operation)
Sum:			\$41.000.00	\$10.000.00	\$18.500.00	\$12.500.00		



2001 Entry Doors

Library Exit Doors

T. Hazardous Material

- Description:
 The School District provided the AHERA three year reinspection reports, prepared by Demshar Environmental, Inc., and dated December 27, 2016, documenting known and assumed locations of asbestos and other hazardous materials. OFCC will need to provide an independent EEA and that budget and scope will be included in the assessment findings. 12/8/21 update: Demshar Environmental Inc. Triennial AHERA Inspection from 12/27/2016 confirms quantities are correct.

 Rating:
 2 Needs Repair
- Recommendations: Remove all hazardous materials, inclusive of asbestos-containing materials in the overall facility as noted in the attached Environmental Hazards Assessment. OFCC to provide an independent EEA assessment.

Item	Cost	Unit	Whole Building	Original Building (1928)	Addition (1969)	Gymnasium Addition (2001)	Sum	Comments
				45,482 ft ²	48,924 ft ²	15,473 ft ²		
Environmental Hazards Form				EHA Form				
Pipe Fitting Insulation Removal	\$20.00	each		28 Required			\$560.00	
Hard Plaster Removal	\$7.00	sq.ft. (Qty)		1,700 Required			\$11,900.00	See J
Laboratory Table/Counter Top Removal	\$100.00	each		80 Required			\$8,000.00	See J
Resilient Flooring Removal, Including Mastic	\$3.00	sq.ft. (Qty)		3,100 Required			\$9,300.00	See J
Sink Undercoating Removal	\$100.00	each		2 Required			\$200.00	
Sum:			\$29,960.00	\$29,960.00	\$0.00	\$0.00		



VAT in a Classroom

U. Life Safety

- Description: The school does not have a compliant automatic fire suppression system. There is no emergency generator. The kitchen exhaust hood does have a hood extinguishing system. 11/29/21 update: Building has limited fire suppression areas (i.e. Storage Rooms).
- Rating: 3 Needs Replacement
- Recommendations:

Provide an automatic fire suppression system throughout the school to meet OSDM guidelines. Provide an emergency generator as well as a new water service line & backflow preventer to have enough capacity for the new sprinkler system.

ltem	Cost	Unit	Whole	Original Building	Addition (1969)	Gymnasium Addition	Sum	Comments
			Building	(1928)	48,924 ft ²	(2001)		
				45,482 ft ²		15,473 ft ²		
Sprinkler / Fire Suppression	\$3.20	sq.ft.		46,370 Required	60,574	10,752 Required	\$376,627.20	(includes increase of service piping, if
System:		(Qty)			Required			required)
Interior Stairwell Closure:	\$5,000.00	per level		6 Required	6 Required		\$60,000.00	(includes associated doors, door frames
								and hardware)
Water Main	\$50.00	ln.ft.		300 Required			\$15,000.00	(new)
Generator:	\$50,000.00	unit		1 Required			\$50,000.00	(75 KW w/fence and pad/day tank only,
								life safety only)
Other: Backflow Preventer	\$5,000.00	lump		Required			\$5,000.00	Backflow Preventer
		sum						
Sum:			\$506,627.20	\$248,384.00	\$223,836.80	\$34,406.40		





LASS backflow preventer

Rescue assistance panel

V. Loose Furnishings

- Description: The typical Classroom furniture is mismatched, and in generally fair condition. 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 5 due to observed conditions and due to the fact that it lacks some of the Design Manual required elements. 11/29/21 update: SHD recommends to maximize OFCC loose furnishings costs for the HS building.
- Rating: 3 Needs Replacement

Recommendations: Provide for replacement of outdated or inadequate furniture.

ltem	Cost	Unit	Whole Building	Original Building (1928)	Addition (1969)	Gymnasium Addition (2001)	Sum	Comments
				45,482 ft ²	48,924 ft ²	15,473 ft ²		
CEFPI Rating 4 to 5	\$5.50	sq.ft. (of entire building addition)		Required	Required	Required	\$604,334.50	
Sum:			\$604,334.50	\$250,151.00	\$269,082.00	\$85,101.50		



Classroom Desks



Cafeteria Tables

W. Technology

Description:	The main distribution frame (MDF) is located in a separate room on the 1st floor of the 1928 building. It is served by a dedicated HVAC unit. Individual classrooms are served by laptop carts and wireless access points. Most classrooms have overhead projectors and Smartboards. The age of the technology equipment varies, but generally it meets the needs of the school.
Rating:	3 Needs Replacement
Recommendations:	Provide complete replacement of technology systems to meet current OSDM guidelines, and to sustain the capacity to keep pace with new technology development.

Item	Cost Unit	Whole Building	Original Building (1928)	Addition (1969)	Gymnasium Addition (2001)	Sum	Comments
		-	45,482 ft ²	48,924 ft ²	15,473 ft ²		
MS portion of building with total SF > 100,000	\$9.00sq.ft. (Qty)	46,370 Required	60,574 Required	10,752 Required	\$1,059,264.00	
Sum:		\$1,059,264.00	\$417,330.00	\$545,166.00	\$96,768.00		



Overhead projector



Flat-screen T.V. in cafeteria

X. Construction Contingency / Non-Construction Cost

Ren	ovat	ion Costs (A-W)		\$15,208,81	6.12	
7.0	0%	Construction Continge	\$1,064,61	7.13		
Sub	total			\$16,273,43	3.25	
16.2	9%	Non-Construction Cost	s	\$2,650,942.28		
Tota	l Pro	oject		\$18,924,37	5.52	
	Co	nstruction Contingency	064,617.13			
	No	n-Construction Costs	\$2,	650,942.28		

\$3,715,559.40

Total for X.

Non-Construction Costs Breakdown		
Land Survey	0.03%	\$4,882.03
Soil Borings / Phase I Envir. Report	0.10%	\$16,273.43
Agency Approval Fees (Bldg. Code)	0.25%	\$40,683.58
Construction Testing	0.40%	\$65,093.73
Printing - Bid Documents	0.15%	\$24,410.15
Advertising for Bids	0.02%	\$3,254.69
Builder's Risk Insurance	0.12%	\$19,528.12
Design Professional's Compensation	7.50%	\$1,220,507.49
CM Compensation	6.00%	\$976,405.99
Commissioning	0.60%	\$97,640.60
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$182,262.45
Total Non-Construction Costs	16.29%	\$2,650,942.28

School Facility Appraisal - Nordonia Hills City

Name of Appraiser	Annalise Bennett Date of App			ate of Appraisal	2019-09-19	
Building Name	Nordonia Middle					
Street Address	73 Leonard Ave					
City/Town, State, Zip Code	Northfield, OH 44067					
Telephone Number(s)	330-467-0584					
School District	Nordonia Hills City					
Setting:	Suburban					
Site-Acreage	10.00	0.00 Building Square Footage		109,879		
Grades Housed	7-8 Student Capacity		644			
Number of Teaching Stations	38 Number of Floors		4			
Student Enrollment	603					
Dates of Construction	1928,1969,2001					
Energy Sources:	Fuel Oil	Gas	0	Electric	□ Solar	
Air Conditioning:	Roof Top	U Windows	Units C	Central	Room Units	
Heating:	Central	Roof Top	, C	Individual Unit	Given Forced Air	
	Hot Water	□ Steam				
Type of Construction	Exterior Surfacing		Floor Construction			
Load bearing masonry	Brick			U Wood Joists		
Steel frame	Stucco	Steel Joists				
Concrete frame	D Metal	Slab on grade				
U Wood	U Wood	Structural slab				
Steel Joists	□ Stone					

Suitability Appraisal of 1.0 The School Site for Nordonia Middle School (Updated 2021) DRAFT

		Bottom of page
uitability Appraisal of 1.0 The School Site for Nordonia Middle School (Updated 2021) DRAFT		
1.0 The School Site	Points Allocated	Points
1.1 Site is large enough to meet educational needs as defined by state and local requirements	25	12
The 10-acre site is less than half the required 25 acres per OSDM for a middle school with 500+ students.		
1.2 Site is easily accessible and conveniently located for the present and future population	20	18
The building is placed in the center of the District.		
1.3 Location is removed from undesirable business, industry, traffic, and natural hazards	10	7
Commercial properties are located on the south side of Leonard Avenue across from the school.		
1.4 Site is well landscaped and developed to meet educational needs	10	7
Mature trees abut the athletic fields. The site is well shaded on the south side, main entry, with mature deciduous and ornamental tre and sidewalks. Well kept shrubs and flower beds accent the main entries. There is no landscaping in or around the parking lots.	ees located adjacent to th	ne building
1.5 ES Well equipped playgrounds are separated from streets and parking areas 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	10	9
Athletic fields are located away from any streets and are adequately separated from parking areas with green space and bleachers.		
1.6 Topography is varied enough to provide desirable appearance and without steep inclines	5	3
Steep inclines exist from the building and north parking lot to the athletic fields.		
1.7 Site has stable, well drained soil free of erosion	5	1
East parking lot slopes toward gymnasium. Evidence of ponding was observed in the athletic fields.		
1.8 Site is suitable for special instructional needs, e.g., outdoor learning	5	4
There are several locations that could be used.		
1.9 Pedestrian services include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes	5	4
Well maintained sidewalks provide pedestrian access from residential areas. Ramps at curb cuts need replaced.		
1.10 ES/MS Sufficient on-site, solid surface parking for faculty and staff is provided HS Sufficient on-site, solid surface parking is provided for faculty, students, staff and community	5	5
Adequate parking, 116 spaces, is provided among three lots.		

Suitability Appraisal of 2.0 Structural and Mechanical Features for Nordonia Middle School (Updated 2021) DRAFT

		Bottom of pag
tability Appraisal of 2.0 Structural and Mechanical Features for Nordonia Middle School (Updated 2021) DRAFT		
2.0 Structural and Mechanical Features	Points Allocated	Points
Structural		
2.1 Structure meets all barrier-free requirements both externally and internally	15	6
Some, but not all, interior doors are ADA compliant. Although drinking fountains are wheelchair compliant no standard height drinkin elevator is provided to upper floors. Lavatories are not ADA, ADA compliant toilet stalls and water closets are provided.	ng fountain is provided p	er ADA. An
2.2 Roofs appear sound, have positive drainage, and are weather tight	15	5
The roof is a built-up asphalt system with masonry parapets and interior roof drains. There is evidence of ponding water and leaks t	below.	
2.3 Foundations are strong and stable with no observable cracks	10	10
No foundation cracks were observed.		
2.4 Exterior and interior walls have sufficient expansion joints and are free of deterioration	10	4
Some tuckpointed is required.		
2.5 Entrances and exits are located so as to permit efficient student traffic flow	10	10
Corridors terminate at exits and-or stairs.		
2.6 Building "envelope" generally provides for energy conservation (see criteria)	10	6
The building is of masonry walls with insulated windows and a roof with insulation.		
2.7 Structure is free of friable asbestos and toxic materials	10	4
Some asbestos materials are present.		
2.8 Interior walls permit sufficient flexibility for a variety of class sizes	10	6
The interior walls are typically CMU and plaster construction.		
Mechanical/Electrical	Points Allocated	Points
2.9 Adequate light sources are well maintained, and properly placed and are not subject to overheating	15	12
Good lighting is provided.		
2.10 Internal water supply is adequate with sufficient pressure to meet health and safety requirements	15	12
Good water pressure is available.		
2.11 Each teaching/learning area has adequate convenient wall outlets, phone and computer cabling for technology applications	15	12
Excellent computer systems are provided.		
2.12 Electrical controls are safely protected with disconnect switches easily accessible	10	8
equipment protected by disconnects.		
2.13 Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled	10	6
Adequate fountains are provided.		
2.14 Number and size of restrooms meet requirements	10	8
Sufficient restrooms are provided.		
2.15 Drainage systems are properly maintained and meet requirements	10	8
No problems reported.		

2.16 Fire alarms, smoke detectors, and sprinkler systems are properly maintained and meet requirements	10	1
No sprinkler system is provided.		
2.17 Intercommunication system consists of a central unit that allows dependable two-way communication between the office and instructional areas	10	2
Two-way voice communication is provided by dated equipment.		
2.18 Exterior water supply is sufficient and available for normal usage	5	4
Hose bibbs around exterior of building are provided.		
TOTAL - 2.0 Structural and Mechanical Features	200	124

Suitability Appraisal of 3.0 Plant Maintainability for Nordonia Middle School (Updated 2021) DRAFT

		Bottom of
tability Appraisal of 3.0 Plant Maintainability for Nordonia Middle School (Updated 2021) DRAFT		
3.0 Plant Maintainability	Points Allocated	Point
3.1 Windows, doors, and walls are of material and finish requiring minimum maintenance	15	1
The windows are aluminum. The interior doors are wood and exterior doors vary among aluminum, hollow metal, or FRP. Interior walls are brick.	s are plaster or CMU and	exterior
3.2 Floor surfaces throughout the building require minimum care	15	
Classroom floors are typically VCT and corridors are terrazzo.		
.3 Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain	10	
The ceilings are typically acoustic lay-in tiles. The walls are typically plaster.		
4 Built-in equipment is designed and constructed for ease of maintenance	10	
The equipment is made of easily maintained materials.		
.5 Finishes and hardware, with compatible keying system, are of durable quality	10	
The finishes include terrazzo, VCT, carpet, painted CMU and plaster, and acoustic ceiling tiles.		
.6 Restroom fixtures are wall mounted and of quality finish	10	
Most fixtures are wall mounted.		
.7 Adequate custodial storage space with water and drain is accessible throughout the building	10	
Custodial storage spaces are provided throughout the building but not all provide water and a drain.		
.8 Adequate electrical outlets and power, to permit routine cleaning, are available in every area	10	
Sufficient power outlets are provided.		
.9 Outdoor light fixtures, electrical outlets, equipment, and other fixtures are accessible for repair and replacement	10	
Ground mounted exterior building lighting is in place.		

Suitability Appraisal of 4.0 Building Safety and Security for Nordonia Middle School (Updated 2021) DRAFT

		Bottom of page
Suitability Appraisal of 4.0 Building Safety and Security for Nordonia Middle School (Updated 2021) DRAFT		
4.0 Building Safety and Security	Points Allocated	Points
Site Safety		
4.1 Student loading areas are segregated from other vehicular traffic and pedestrian walkways	15	6
The bus loading area is a third lane of Leonard Avenue.		
4.2 Walkways, both on and offsite, are available for safety of pedestrians	10	10
Concrete sidewalks are provided for pedestrians.		
4.3 Access streets have sufficient signals and signs to permit safe entrance to and exit from school area	5	5
Adequate signaling and signage is provided.		
4.4 Vehicular entrances and exits permit safe traffic flow	5	3
Curb cuts are of adequate number and size however when buses are parked in the designated drop-off and pick-up lane; visi east from the north lot.	on will be obstructed to vehicle	es exiting
 4.5 ES Playground equipment is free from hazard MS Location and types of intramural equipment are free from hazard HS Athletic field equipment is properly located and is free from hazard 	5	5
Athletic fields and equipment are well maintained.		
Building Safety	Points Allocated	Points
4.6 The heating unit(s) is located away from student occupied areas	20	8
Cabinet heaters in corridors.		
4.7 Multi-story buildings have at least two stairways for student egress	15	15
A total of 4 separate stairways are provided.		
4.8 Exterior doors open outward and are equipped with panic hardware	10	10
Exterior doors are equipped with panic hardware and open outward.		
4.9 Emergency lighting is provided throughout the entire building with exit signs on separate electrical circuits	10	8
Good coverage of exits.		
4.10 Classroom doors are recessed and open outward	10	3
Classroom doors open outward but are only partially recessed.		
4.11 Building security systems are provided to assure uninterrupted operation of the educational program	10	1
NO operable security system, except door locks.		
4.12 Flooring (including ramps and stairways) is maintained in a non-slip condition	5	5
Corridor flooring is typically terrazzo.		
4.13 Stair risers (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16	5	3
Stair risers were measured at 7".		
4.14 Glass is properly located and protected with wire or safety material to prevent accidental student injury	5	3
There is no wire glass in the building. Glass in hazardous locations may be tempered.		
4.15 Fixed Projections in the traffic areas do not extend more than eight inches from the corridor wall	5	5

There are no fixed projections extending into the corridor. The classroom doors are semi-recessed and extend 6-8 into corridor.		
1.16 Traffic areas terminate at an exit or a stairway leading to an egress	5	5
Corridors terminate at stairways and/or exit doors.		
Emergency Safety	Points Allocated	Points
1.17 Adequate fire safety equipment is properly located	15	12
The equipment that is present is adequately located.		
1.18 There are at least two independent exits from any point in the building	15	15
All corridors terminate at an egress door and/or stairway, providing two means of egress throughout the building.		
1.19 Fire-resistant materials are used throughout the structure	15	15
The building is constructed of masonry, concrete slab-on-grade, and steel roof framing.		
1.20 Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided	15	6
Horn/strobes throughout, except classrooms.		

		Bottom of page
Suitability Appraisal of 5.0 Educational Adequacy for Nordonia Middle School (Updated 2021) DRAFT 5.0 Educational Adequacy	Points Allocated	Points
Academic Learning Space		
5.1 Size of academic learning areas meets desirable standards	25	18
Classroom sizes vary between 880 SF and 1,100 SF. The OSDM requires a minimum of 900 SF per classroom.		
5.2 Classroom space permits arrangements for small group activity	15	15
The typical classroom is provided with separate tables and chairs and separate computer workstations.		
5.3 Location of academic learning areas is near related educational activities and away from disruptive noise	10	6
A few classrooms are located near the gymnasium.		
5.4 Personal space in the classroom away from group instruction allows privacy time for individual students	10	10
The typical classroom is provided with separate computer workstations.		
5.5 Storage for student materials is adequate	10	6
Student lockers are provided in the corridors. Student desks do not permit temporary student material storage.		
5.6 Storage for teacher materials is adequate	10	4
Teacher material storage is limited to loose furnishings such as desks, file cabinets, storage cabinets.		
Special Learning Space	Points Allocated	Points
5.7 Size of special learning area(s) meets standards	15	2
Special learning areas are limited to a few small classrooms. No self-contained classrooms are provided. Program spaces per the OS	SDM are not provided.	
5.8 Design of specialized learning area(s) is compatible with instructional need	10	2
Special learning areas are limited to a few small classrooms. No self-contained classrooms are provided. Program spaces per the OS	SDM are not provided.	
5.9 Library/Resource/Media Center provides appropriate and attractive space	10	10
The Media Center is approximately 2,900 SF. The OSDM requires the Media Center to be a minimum 1,575 SF.		
5.10 Gymnasium (or covered P.E. area) adequately serves physical education instruction	5	5
Two gymnasiums are provided one at 4,677 SF and one at 5,565 SF. The OSDM only requires one gymnasium between 7,000 SF ar	nd 8,500 SF.	
5.11 ES Pre-kindergarten and kindergarten space is appropriate for age of students and nature of instruction MS/HS Science program is provided sufficient space and equipment	10	10
Four Science rooms are provided at approximately 1,000 SF.		
5.12 Music Program is provided adequate sound treated space	5	4
Acoustic lay-in ceilings are provided. CMU walls are not sound-treated.		
5.13 Space for art is appropriate for special instruction, supplies, and equipment	5	1
Two art classrooms are provided with minimal storage cabinets. Loose furnishings are in poor condition.		
School Facility Appraisal	Points Allocated	Points
5.14 Space for technology education permits use of state-of-the-art equipment	5	5
A typical classroom has at least 2 computers, a television, and a VCR. Separate computer labs are also provided.		
5.15 Space for small groups and remedial instruction is provided adjacent to classrooms	5	4

Remedial, small group classrooms are provided in one area of the building.

5.16 Storage for student and teacher material is adequate

Student lockers are provided in the corridors. Student desks do not permit temporary student material storage. Teacher material storage is limited to loose furnishings such as desks, file cabinets, storage cabinets.

Support Space	Points Allocated	Points
5.17 Teacher's lounge and work areas reflect teachers as professionals	10	8
The Teacher's Lounge is provided with 2 couches, 5 tables with chairs, a microwave, refrigerator, and 2 vending machines.		
5.18 Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation	10	10
The Cafeteria accommodates approximately 200 students. The Kitchen is well-equipped according to the OSDM.		
5.19 Administrative offices provided are consistent in appearance and function with the maturity of the students served	5	5
The Administrative Offices have carpeted floors, painted CMU walls, and acoustic lay-in ceilings. Four chairs for students or visitors are workrooms are provided.	∍ provided. Separate c	offices and
5.20 Counselor's office insures privacy and sufficient storage	5	5
The Counselor's Office is near the Administrative Offices and full height partitions are provided for privacy. Storage rooms are provided	1.	
5.21 Clinic is near administrative offices and is equipped to meet requirements	5	5
The Clinic is near the Administrative Offices and is equipped with one desk, one table, three chairs, one bed, one refrigerator, and one room is also provided.	supply cabinet. A sep	arate toilet
5.22 Suitable reception space is available for students, teachers, and visitors	5	5
Four chairs and a small table are provided for visitors or students.		
5.23 Administrative personnel are provided sufficient work space and privacy	5	5
The Administrative Offices are separated from the corridor with full height CMU partitions and doors.		
TOTAL - 5.0 Educational Adequacy	200	147

5

2

Suitability Appraisal of 6.0 Environment for Education for Nordonia Middle School (Updated 2021) DRAFT

bility Appraisal of 6.0 Environment for Education for Nordonia Middle School (Updated 2021) DRAFT			
Environment for Education	Points Allocated	Points	
Exterior Environment			
6.1 Overall design is aesthetically pleasing to age of students	15	13	
Interior finishes are well integrated and appropriate for the age group of the students.			
6.2 Site and building are well landscaped	10	7	
The existing landscaping provides a variety of species for trees, shrubs, and flowers situated attractively on the	site.		
6.3 Exterior noise and poor environment do not disrupt learning	10	9	
Site is located in a relatively quiet residential neighborhood with minimal commercial property near the site.			
6.4 Entrances and walkways are sheltered from sun and inclement weather	10	5	
Shade trees provide some sun protection along walkways at main entry facade. There are no canopies or other	r means of protection at e	entrances.	
6.5 Building materials provide attractive color and texture	5	4	
The interior materials consist of plaster, VCT, and acoustic ceilings. The colors are predominately neutral beige	es and whites.		
Interior Environment	Points Allocated	Points	
6.6 Color schemes, building materials, and decor provide an impetus to learning	20	18	
The colors are predominately neutral beiges and whites. Few accent colors are provided.			
5.7 Year around comfortable temperature and humidity are provided throughout the building	15	6	
Partial air conditioning is provided.			
6.8 Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement	15	6	
Adequate ventilation needs to be improved in the older portion.			
6.9 Lighting system provides proper intensity, diffusion, and distribution of illumination	15	12	
Good lighting.			
6.10 Drinking fountains and restroom facilities are conveniently located	15	9	
Some non-ADA, no high/low fountains. Toilet rooms are located directly from the corridors.			
6.11 Communication among students is enhanced by commons area(s) for socialization	10	10	
Cafeteria, gymnasiums, and foyers are provided.			
6.12 Traffic flow is aided by appropriate foyers and corridors	10	10	
Corridors terminate at foyers, exits, and stairways.			
6.13 Areas for students to interact are suitable to the age group	10	10	
Cafeteria, gymnasiums, corridors, and foyers are provided.			
6.14 Large group areas are designed for effective management of students	10	10	
The large group areas generally free of obstructions and provide clear fields of vision.			
6.15 Acoustical treatment of ceilings, walls, and floors provides effective sound control	10	7	
The ceilings are typically acoustic lay-in systems. The walls are plaster and the floors are VCT.			
6.16 Window design contributes to a pleasant environment	10	8	

TOTAL - 6.0 Environment for Education	200	149
The loose furnishings are inconsistent in style, color, and materials. Many pieces of furniture are damaged.		
6.17 Furniture and equipment provide a pleasing atmosphere	10	5
The windows are aluminum with a fixed and operable portion. The glass is insulated.		

LEED Observation Notes

School District:	Nordonia Hills City
County:	Summit
School District IRN:	50047
Building:	Nordonia Middle
Building IRN:	27326

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)

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)

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)

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)

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)

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)

Justification for Allocation of Points - Nordonia Hills City

7-8

Building features that clearly exceed criteria:

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

Building features that are non-existent or very inadequate:

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

Back to Assessment Summary

Environmental Hazards Assessment Cost Estimates

Owner:	Nordonia Hills City
Facility:	Nordonia Middle
Date of Initial Assessment:	Sep 19, 2019
Date of Assessment Update:	Dec 8, 2021
Cost Set:	2021

District IRN:	50047
Building IRN:	27326
	OFCC

Scope remains unchanged after cost updates.

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates		
Building Addition	Addition Area (SI)	Renovation	Demolition	
1928 Original Building	45,482	\$29,960.00	\$29,960.00	
1969 Addition	48,924	\$0.00	\$0.00	
2001 Gymnasium Addition	15,473	\$0.00	\$0.00	
Total	109,879	\$29,960.00	\$29,960.00	
Total with Regional Cost Factor (109.74%)	_	\$32,878.10	\$32,878.10	
Regional Total with Soft Costs & Contingency		\$40,910.32	\$40,910.32	

Environmental Hazards - Nordonia Hills City (50047) - Nordonia Middle (27326) - Original Building

Environmental Hazards - Nordonia Hills City (50047) - Nordonia Middle (27326) - Original Building

Owner:	Nordonia Hills City	Bldg. IRN:	27326
Facility:	Nordonia Middle	BuildingAdd:	Original Building
Date On-Site:		Consultant Name:	

A. Asbestos Containing Material (ACM) AFM=Asbestos Free Ma				stos Free Material
ACM Found	Status	Quantity		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
 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	Reported Asbestos-Containing Material	28	\$20.00	\$560.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$12.00	\$0.00
8. Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00	\$0.00
9. Pipe Insulation Removal (Hidden in Walls/Ceilings)	Not Present	0	\$15.00	\$0.00
10. Dismantling of Boiler/Furnace/Incinerator	Not Present	0	\$2,000.00	\$0.00
11. Flexible Duct Connection Removal	Not Present	0	\$100.00	\$0.00
12. Acoustical Plaster Removal	Not Present	0	\$7.00	\$0.00
13. Fireproofing Removal	Not Present	0	\$25.00	\$0.00
14. Hard Plaster Removal	Reported Asbestos-Containing Material	1700	\$7.00	\$11,900.00
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	Reported Asbestos-Containing Material	80	\$100.00	\$8,000.00
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	Reported Asbestos-Containing Material	3100	\$3.00	\$9,300.00
30. Carpet Mastic Removal	Not Present	0	\$2.00	\$0.00
31. Carpet Removal (over RFC)	Not Present	0	\$1.00	\$0.00
32. Acoustical Tile Mastic Removal	Not Present	0	\$3.00	\$0.00
33. Sink Undercoating Removal	Reported Asbestos-Containing Material	2	\$100.00	\$200.00
34. Roofing Removal	Not Present	0	\$2.00	\$0.00
35. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Re	novation Wor	k	\$29,960.00
36. (Sum of Lines 1-34) Total Asb. Hazard Abatement Cost for Demolition Work			\$29,960.00	

B. Removal Of Underground Storage Tanks					
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						
1. Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups						
2. Special Engineering Fees for LBP Mock-Ups						
3. (Sum of Lines 1-2)		Total Cost for Lead-Based Paint	Mock-Ups	\$0.00		
D. Fluorescent Lamps & Ballasts Recycling/Incin	eration			Not Applicable		
Area Of Building Addition	Square Feet w/Fluorescent Lamp	os & Ballasts	Unit Cost	Total Cost		
1. 45482 0			\$0.1	0 \$0.00		
E. Other Environmental Hazards/Remarks						
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 Wo	rk - Renovation	\$29,960.00		
A36, B1, D1, and E2		Total Cost for Env. Hazards Wo	ork - Demolition	\$29,960.00		

* 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.