Building Information - Marietta City SD (44321) - Harmar Elementary School

Program Type	Classroom Facilities Assistance Program (CFAP) - Regular
Setting	Small City
Assessment Name	Harmar Elementary School
Assessment Date (on-site; non-EEA)	2017-10-17
Kitchen Type	Warming Kitchen
Cost Set:	2019
Building Name	Harmar Elementary School
Building IRN	15297
Building Address	100 Fort Square
Building City	Marietta
Building Zipcode	45750
Building Phone	740-374-6510
Acreage	4.00
Current Grades:	PK-5
Teaching Stations	26
Number of Floors	3
Student Capacity	356
Current Enrollment	262
Enrollment Date	2017-10-17

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

Number of Classrooms	26
Historical Register	**NO**
Building's Principal	Cheryl Cook
Building Type	Elementary

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Building Pictures - Marietta City SD(44321) - Harmar Elementary School(15297)

North elevation photo:

East elevation photo:

South elevation photo:

West elevation photo:

GENERAL DESCRIPTION

44,540 Total Existing Square Footage
1954,1955 Building Dates
PK-5 Grades
262 Current Enrollment
26 Teaching Stations
4.00 Site Acreage

Harmar Elementary School, which is not on the National Register of Historic Buildings, and originally constructed in 1954, is a 3 story, 44,540 square foot brick and stone school building located in a small town residential 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 slabs on grade and supported slabs. The roof structure is steel joists. The roofing system of the overall facility is built-up asphalt with gravel ballast and sprayed on foam, installed well over 7 years ago. The ventilation system of the building is inadequate and does not meet current OBBC requirements or OSDM standards. The Classrooms are undersized in terms of the current standards established by the State of Ohio. Physical Education and Student Dining spaces consist of one Multipurpose space. The electrical system for the facility is inadequate. The facility is equipped with a non-compliant security system. The building has a non-compliant automatic fire alarm system. The facility is not equipped with an automated fire suppression. The building is reported to asbestos. The overall building is not compliant with ADA accessibility requirements. The school is located on a 4 acre site adjacent to residential properties. The property and playgrounds are partially fenced for security. Access onto the site is unrestricted. Site circulation is poor. There is no dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is inadequate.

This building is located in the Ohio River Flood Plain

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Building Construction Information - Marietta City SD (44321) - Harmar Elementary School (15297)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition	Built Under ELPP
Original Building	1954	no	3	35,969	no	no
Addition 1	1955	no	2	8,571	no	no

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Building Component Information - Marietta City SD (44321) - Harmar Elementary School (15297)

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 (1954)		7003						953						
Addition 1 (1955)		273		3055	3004		704							
Total	0	7,276	0	3,055	3,004	0	704	953	0	0	0	0	0	0

Master Planning Considerations

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Existing CT Programs for Assessment

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Program Type	Program Name	Related Space	Square Feet
No Records Found			

Legend:

Not in current design manual

In current design manual but missing from assessment

Building Summary - Harmar Elementary School (15297)

District:	Marietta City SD	**County:**	Washington **Area:** Southeastern Ohio (6)
Name:	Harmar Elementary School	**Contact:**	Cheryl Cook
Address:	100 Fort Square Marietta,OH 45750	**Phone:**	740-374-6510
		Date Prepared:	2017-10-17 **By:** Tony Schorr
Bldg. IRN:	15297	**Date Revised:**	2017-12-19 **By:** Laura Kretz

Current Grades	PK-5	Acreage:	4.00
Proposed Grades	N/A	Teaching Stations:	26
Current Enrollment	262	Classrooms:	26
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Building	1954	no	3	35,969
Addition 1	1955	no	2	8,571
Total				**44,540**

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

	FACILITY ASSESSMENT Cost Set: 2019	Rating	Dollar Assessment	C
A.	Heating System	3	$1,558,900.00	-
B.	Roofing	3	$277,610.00	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$722,884.20	-
E.	Plumbing and Fixtures	3	$455,980.00	-
F.	Windows	3	$448,000.00	-
G.	Structure: Foundation	1	$0.00	-
H.	Structure: Walls and Chimneys	3	$116,250.00	-
I.	Structure: Floors and Roofs	1	$0.00	-
J.	General Finishes	3	$954,824.50	-
K.	Interior Lighting	3	$289,510.00	-
L.	Security Systems	3	$171,479.00	-
M.	Emergency/Egress Lighting	3	$44,540.00	-
N.	Fire Alarm	3	$100,215.00	-
O.	Handicapped Access	3	$472,408.00	-
P.	Site Condition	3	$423,329.00	-
Q.	Sewage System	1	$0.00	-
R.	Water Supply	1	$0.00	-
S.	Exterior Doors	3	$35,000.00	-
T.	Hazardous Material	3	$42,300.00	-
U.	Life Safety	3	$282,528.00	-
V.	Loose Furnishings	3	$289,510.00	-
W.	Technology	3	$623,560.00	-
X.	Construction Contingency / Non-Construction Cost	-	$1,785,568.53	-
Total			$9,094,396.23	

Suitability Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	43	43%	Poor
2.0 Structural and Mechanical Features	200	108	54%	Borderline
3.0 Plant Maintainability	100	50	50%	Borderline
4.0 Building Safety and Security	200	145	73%	Satisfactory
5.0 Educational Adequacy	200	105	53%	Borderline
6.0 Environment for Education	200	116	58%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	567	57%	Borderline

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	101.86%
Cost to Renovate (Cost Factor applied)	$9,263,552.00

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

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Original Building (1954) Summary

District:	Marietta City SD	**County:**	Washington **Area:** Southeastern Ohio (6)
Name:	Harmar Elementary School	**Contact:**	Cheryl Cook
Address:	100 Fort Square	**Phone:**	740-374-6510
	Marietta,OH 45750	**Date Prepared:**	2017-10-17 **By:** Tony Schorr
Bldg. IRN:	15297	**Date Revised:**	2017-12-19 **By:** Laura Kretz

Current Grades	PK-5	Acreage:	4.00
Proposed Grades	N/A	Teaching Stations:	26
Current Enrollment	262	Classrooms:	26
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Building	**1954**	**no**	**3**	**35,969**
Addition 1	1955	no	2	8,571
Total				**44,540**

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

		FACILITY ASSESSMENT Cost Set: 2019	Rating	Dollar Assessment	C
	A.	Heating System	3	$1,258,915.00	-
	B.	Roofing	3	$202,400.00	-
	C.	Ventilation / Air Conditioning	1	$0.00	-
	D.	Electrical Systems	3	$583,776.87	-
	E.	Plumbing and Fixtures	3	$395,983.00	-
	F.	Windows	3	$385,000.00	-
	G.	Structure: Foundation	1	$0.00	-
	H.	Structure: Walls and Chimneys	3	$89,750.00	-
	I.	Structure: Floors and Roofs	1	$0.00	-
	J.	General Finishes	3	$793,546.20	-
	K.	Interior Lighting	3	$233,798.50	-
	L.	Security Systems	3	$138,480.65	-
	M.	Emergency/Egress Lighting	3	$35,969.00	-
	N.	Fire Alarm	3	$80,930.25	-
	O.	Handicapped Access	3	$409,693.80	-
	P.	Site Condition	3	$353,344.40	-
	Q.	Sewage System	1	$0.00	-
	R.	Water Supply	1	$0.00	-
	S.	Exterior Doors	3	$30,000.00	-
	T.	Hazardous Material	3	$24,300.00	-
	U.	Life Safety	3	$255,100.80	-
	V.	Loose Furnishings	3	$233,798.50	-
	W.	Technology	3	$503,566.00	-
-	X.	Construction Contingency / Non-Construction Cost	-	$1,467,858.66	-
Total				$7,476,211.63	

Suitability Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	43	43%	Poor
2.0 Structural and Mechanical Features	200	108	54%	Borderline
3.0 Plant Maintainability	100	50	50%	Borderline
4.0 Building Safety and Security	200	145	73%	Satisfactory
5.0 Educational Adequacy	200	105	53%	Borderline
6.0 Environment for Education	200	116	58%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	567	57%	Borderline

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	101.86%
Cost to Renovate (Cost Factor applied)	$7,615,269.16

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

Addition 1 (1955) Summary

District:	Marietta City SD	**County:**	Washington **Area:** Southeastern Ohio (6)
Name:	Harmar Elementary School	**Contact:**	Cheryl Cook
Address:	100 Fort Square	**Phone:**	740-374-6510
	Marietta,OH 45750	**Date Prepared:**	2017-10-17 **By:** Tony Schorr
Bldg. IRN:	15297	**Date Revised:**	2017-12-19 **By:** Laura Kretz

Current Grades	PK-5	Acreage:	4.00
Proposed Grades	N/A	Teaching Stations:	26
Current Enrollment	262	Classrooms:	26
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Building	1954	no	3	35,969
Addition 1	**1955**	**no**	**2**	**8,571**
Total				**44,540**

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

	FACILITY ASSESSMENT Cost Set: 2019	Rating	Dollar Assessment	C
A.	Heating System	3	$299,985.00	-
B.	Roofing	3	$75,210.00	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$139,107.33	-
E.	Plumbing and Fixtures	3	$59,997.00	-
F.	Windows	3	$63,000.00	-
G.	Structure: Foundation	1	$0.00	-
H.	Structure: Walls and Chimneys	3	$26,500.00	-
I.	Structure: Floors and Roofs	1	$0.00	-
J.	General Finishes	3	$161,278.30	-
K.	Interior Lighting	3	$55,711.50	-
L.	Security Systems	3	$32,998.35	-
M.	Emergency/Egress Lighting	3	$8,571.00	-
N.	Fire Alarm	3	$19,284.75	-
O.	Handicapped Access	3	$62,714.20	-
P.	Site Condition	3	$69,984.60	-
Q.	Sewage System	1	$0.00	-
R.	Water Supply	1	$0.00	-
S.	Exterior Doors	3	$5,000.00	-
T.	Hazardous Material	3	$18,000.00	-
U.	Life Safety	3	$27,427.20	-
V.	Loose Furnishings	3	$55,711.50	-
W.	Technology	3	$119,994.00	-
X.	Construction Contingency / Non-Construction Cost	-	$317,709.88	-
Total			$1,618,184.61	

Suitability Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	43	43%	Poor
2.0 Structural and Mechanical Features	200	108	54%	Borderline
3.0 Plant Maintainability	100	50	50%	Borderline
4.0 Building Safety and Security	200	145	73%	Satisfactory
5.0 Educational Adequacy	200	105	53%	Borderline
6.0 Environment for Education	200	116	58%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	567	57%	Borderline

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	101.86%
Cost to Renovate (Cost Factor applied)	$1,648,282.84

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 overall structure is heated by two gas-fired steam boilers. The boilers were manufactured in 2006 and are in good condition. Low pressure steam is distributed throughout the building to unit ventilators in the classrooms, finned radiation in the basement and a steam heating coil in the air handling unit for the gymnasium. The system does not provide the required outdoor air as per OBBC requirements or OSDM design standards. The system temperature controls are predominantly pneumatic; however, there is a stand-along direct digital control (DDC) system controlling the boilers. The structure is not equipped with air conditioning. There is no room for above-ceiling ductwork.

Rating: 3 Needs Replacement

Recommendations: Provide new overall heating system to meet OFCC design standards, including air conditioning.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
HVAC System Replacement:	$27.00	sq.ft. (of entire building addition)		Required	Required	$1,202,580.00	(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	$356,320.00	(includes costs for vert. & horz. chases, cut openings, soffits, etc. Must be used in addition to HVAC System Replacement if the existing HVAC system is non-ducted)
Sum:			$1,558,900.00	$1,258,915.00	$299,985.00		

Steam heating boilers

Steam condensate return pump

Back to Assessment Summary

B. Roofing

Description: The current roofing systems include sprayed on foam and modified bitumen. All are greater than 7 years of age.

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. Add overflow drains as well.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Membrane (all types / fully adhered):	$10.00	sq.ft. (Qty)		12,000 Required	4,300 Required	$163,000.00	(unless under 10,000 sq.ft.)
Overflow Roof Drains and Piping:	$3,000.00	each		8 Required	4 Required	$36,000.00	
Roof Insulation:	$4.70	sq.ft. (Qty)		12,000 Required	4,300 Required	$76,610.00	(tapered insulation for limited area use to correct ponding)
Roof Access Ladder with Fall Protection Cage:	$100.00	ln.ft.		20 Required		$2,000.00	(remove and replace)
Sum:			$277,610.00	$202,400.00	$75,210.00		

Existing Roof

Existing Roof

Back to Assessment Summary

C. Ventilation / Air Conditioning

Description: The overall facility is not equipped with air conditioning. The gymnasium has a forced-air heating and ventilating unit on the stage in fair condition. The main office, teacher's lounge and nurse's clinic have a Mitsubishi City-multi variable refrigerant flow (VRF) system, which is in good condition.

Rating: 1 Satisfactory

Recommendations: Provide an air conditioning system to meet OFCC design manual requirements. Pricing included in Item A.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00		

Ductless split-system A/C unit

Gymnasium H&V unit

Back to Assessment Summary

D. Electrical Systems

Description: The school has a 600 Amp 240/120 Volt, single phase, three wire electrical service. Service from a pole-mounted transformer extends overhead to the back of the building. The electrical distribution and service entrance are original and were installed in 1954. The service is in poor condition. Panels are fully loaded. Some new panels have been installed; however, the 50 year old wiring has been reused.

Rating: 3 Needs Replacement

Recommendations: Provide 1200 Amp, 480/277 Volt electrical service. Provide pad-mounted oil-filled transformer to accommodate new electrical service. Provide new electrical distribution to include panels, receptacles, conduit, and wiring.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
System Replacement:	$16.23	sq.ft. (of entire building addition)		Required	Required	$722,884.20	(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:			$722,884.20	$583,776.87	$139,107.33		

1954 Main electrical service

Overhead electrical service to bldg

Back to Assessment Summary

E. Plumbing and Fixtures

Description: The boys' restrooms have floor-mounted toilets, wall-mounted urinals with manual flush valves, and wall-mounted wash fountains. They are in good condition. The girls' restrooms contains floor-mounted toilets and wall-mounted wash fountains. These fixtures are in good condition. The school contains six electric water coolers (EWC's), some with bottle filling stations. They are in fair to good condition. The staff restrooms contain floor-mounted toilets and wall-hung lavatories that are in poor condition. The facility has two water heaters: one gas-fired tank-type water heater for general use, and one electric tank-type water heater for the kitchen. Both heaters are in good condition. There is a backflow preventer (BFP) on the domestic water service; however it is not a reduced pressure principle BFP as required by Code. It is in fair condition, but must be replaced. There is a 4'' domestic water service line, which reportedly was replaced from the tap to the building 4-5 years ago. Domestic water piping in the mechanical room is galvanized, but most piping throughout the building has been changed to copper.

Rating: 3 Needs Replacement

Recommendations: Replace all plumbing fixtures. See Item ''O'' Handicap Access for additional fixture replacement. Provide a new backflow preventer.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Back Flow Preventer:	$5,000.00	unit		1 Required		$5,000.00	
Domestic Supply Piping:	$3.50	sq.ft. (of entire building addition)		Required	Required	$155,890.00	(remove / replace)
Sanitary Waste Piping:	$3.50	sq.ft. (of entire building addition)		Required	Required	$155,890.00	(remove / replace)
Toilet:	$3,800.00	unit		25 Required		$95,000.00	(new)
Urinal:	$3,800.00	unit		9 Required		$34,200.00	(new)
Sink:	$2,500.00	unit		4 Required		$10,000.00	(new)
Sum:			$455,980.00	$395,983.00	$59,997.00		

2-head washfountain

Wall-mtd urinals

Back to Assessment Summary

F. Windows

Description: The overall facility is equipped with single glazed windows and are in poor condition. Window system seals are in poor condition, with minimal air and water infiltration being experienced. Window system hardware is in fair condition. The window system features no blinds. The window system is not equipped with insect screens on operable windows. There are glass block windows in the gym addition, in fair condition.

Rating: 3 Needs Replacement

Recommendations: Replace the existing non-insulated window system and glass block with a new insulated window system to comply with Ohio School Design Manual requirements.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Insulated Glass/Panels:	$70.00	sq.ft. (Qty)		5,500 Required	900 Required	$448,000.00	(includes blinds)
Sum:			$448,000.00	$385,000.00	$63,000.00		

Glass Block at the Gym

Typical Classroom Windows

Back to Assessment Summary

G. Structure: Foundation

Description: The overall facility is equipped with concrete masonry unit foundation walls on concrete footings, which displayed no locations of significant differential settlement, cracking, or leaking, and are in fair condition. 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	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00		

Back to Assessment Summary

H. Structure: Walls and Chimneys

Description: The overall facility has a brick veneer on a masonry bearing wall system which displayed locations of deterioration, and is in fair condition. The exterior masonry appears to have appropriately spaced and adequately caulked control joints in fair condition. Control joints are not provided at lintel locations at doors and windows. The school does not contain expansion joints, and none are needed as there is no indication of exterior masonry cracking or separation. The exterior masonry has not been cleaned and sealed in recent years, and shows evidence of minor mortar deterioration. Interior walls are concrete masonry units and glazed block and are in fair condition. The window sills are stone, and are in fair condition. The exterior lintels are steel, and are in fair condition.

Rating: 3 Needs Replacement

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. Provide masonry/brick infills where unit ventilation will be removed.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Tuckpointing:	$7.50	sq.ft. (Qty)		2,000 Required	1,000 Required	$22,500.00	(wall surface)
Exterior Masonry Cleaning:	$1.50	sq.ft. (Qty)		15,000 Required	6,000 Required	$31,500.00	(wall surface)
Exterior Masonry Sealing:	$1.00	sq.ft. (Qty)		15,000 Required	6,000 Required	$21,000.00	(wall surface)
Exterior Caulking:	$7.50	ln.ft.		300 Required	200 Required	$3,750.00	(removing and replacing)
Other: Masonry infills @ unit ventilators	$2,500.00	each		14 Required	1 Required	$37,500.00	Masonry Infills
Sum:			$116,250.00	$89,750.00	$26,500.00		

Repaired brick

Uncleaned brick

Back to Assessment Summary

I. Structure: Floors and Roofs

Description:

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00		

Poured Slab above basement floor

Steel Trusses at Gym

Back to Assessment Summary

J. General Finishes

Description: The overall facility features conventionally partitioned Classrooms with VAT and VCT flooring, suspended ceilings, as well as painted wall finishes, and they are in good condition. The overall facility has Corridors with terrazzo flooring, suspended ceilings, as well as tile wall finishes, and they are in good condition. The overall facility has Restrooms with ceramic flooring, painted ceilings, as well as tile wall finishes, and they are in good condition. Toilet partitions are plastic, and are in fair condition. Classroom casework in the overall facility is wood construction with plastic laminate tops, is inadequately provided, and in fair condition. The lockers, located in the Classrooms and Corridors, are adequately provided, and in fair condition. The Art program is not equipped with a kiln. The facility is equipped with wood and metal interior doors that are partially recessed with and without proper ADA hardware and clearances, and in fair condition. The Gymnasium space has VAT type flooring, open ceilings, as well as painted wall finishes, and they are in fair condition. Gymnasium basketball backboards are fixed, and are in fair condition. The Media Center, located in the basement, has carpet flooring, suspended ceilings, as well as painted wall finishes, and they are in fair condition. Student Dining shares the Gymnasium space. The existing Kitchen is a Warming Kitchen only, is undersized based on current enrollment, and the existing Kitchen equipment, installed in 1954, is in poor to fair condition. The Kitchen hood is in fair condition, and is not equipped with the required UL 300 compliant wet chemical fire suppression system.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of finishes (and casework) due to installation of systems outlined in Items A, C, D, E, I, K, L, M, N, T, U. Provide for the replacement of all kitchen equipment due to age and condition.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Complete Replacement of Finishes and Casework (Elementary):	$17.10	sq.ft. (of entire building addition)		Required	Required	$761,634.00	(elementary, per building area, with removal of existing)
Toilet Accessory Replacement	$0.20	sq.ft. (of entire building addition)		Required	Required	$8,908.00	(per building area)
Door, Frame, and Hardware:	$1,300.00	each		25 Required	10 Required	$45,500.00	(non-ADA)
Bleacher Replacement	$110.00	per seat		262 Required		$28,820.00	(based on current enrollment)
Art Program Kiln:	$2,750.00	each		1 Required		$2,750.00	
Total Warming Kitchen Replacement	$112.50	sq.ft. (Qty)		953 Required		$107,212.50	(square footage based upon only existing area of food preparation, serving, kitchen storage areas and walk-ins. Includes demolition and removal of existing kitchen equipment)
Sum:			$954,824.50	$793,546.20	$161,278.30		

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K. Interior Lighting

Description: The lighting system is comprised of 1'X4'surface-mounted and 2'X4' lay-in fixtures in the corridors. The classroom lighting is comprised of 1'X8' pendant fixtures and 2'X4' lay-in fixtures. The gymnasium lighting is comprised of (8) metal halide fixtures. Corridors average 25 footcandles. The classrooms average 40 footcandles. The gymnasium lighting averaged 40-60 footcandles, although there was an abundance of natural light.

Rating: 3 Needs Replacement

Recommendations: Install new lighting system due to sprinkler installation under Item U: Life Safety.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Complete Building Lighting Replacement	$6.50	sq.ft. (of entire building addition)		Required	Required	$289,510.00	Includes demo of existing fixtures
Sum:			$289,510.00	$233,798.50	$55,711.50		

Gymnasium lighting

Classroom surface-mtd. lighting

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L. Security Systems

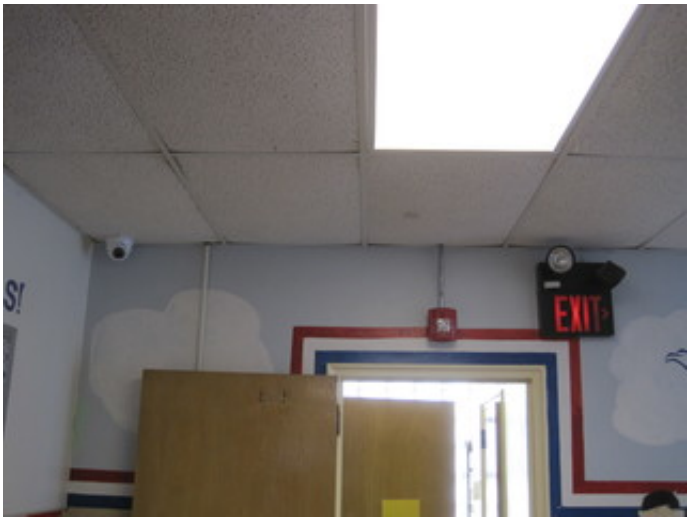
Description: The security system is comprised of motion sensors, interior and exterior cameras, door contacts, and an electronic keypad. The site lighting is not adequate.

Rating: 3 Needs Replacement

Recommendations: Provide new security system to include digital cameras, digital video storage, door contactors, and motion sensors. System shall have microprocessor control for all installed components at a central location. Provide new site lighting to provide the illumination required by the Ohio School Design Manual.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Security System:	$2.85	sq.ft. (of entire building addition)		Required	Required	$126,939.00	(complete, area of building)
Exterior Site Lighting:	$1.00	sq.ft. (of entire building addition)		Required	Required	$44,540.00	(complete, area of building)
Sum:			$171,479.00	$138,480.65	$32,998.35		

Security camera



Security camera in corridor

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M. Emergency/Egress Lighting

Description: The building has dual head emergency egress lighting and exit signs with battery back-up located throughout. The exit signs do not have a dedicated circuit for all fixtures.

Rating: 3 Needs Replacement

Recommendations: Provide new emergency egress lighting and exit signs. Emergency lighting and exit signs shall be located and provided to meet current applicable codes and the Ohio School Design Manual.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Emergency/Egress Lighting:	$1.00	sq.ft. (of entire building addition)		Required	Required	$44,540.00	(complete, area of building)
Sum:			$44,540.00	$35,969.00	$8,571.00		

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N. Fire Alarm

Description: The fire alarm system is zoned with pull stations at all exits. There are combination audio/visual devices in the corridors. The classrooms do not have horn/strobes.

Rating: 3 Needs Replacement

Recommendations: Provide new devices to include horn/strobes, smoke detectors, tamper/flow switches to comply with current applicable codes and Ohio School Design Manual.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Fire Alarm System:	$2.25	sq.ft. (of entire building addition)		Required	Required	$100,215.00	(complete new system, including removal of existing)
Sum:			$100,215.00	$80,930.25	$19,284.75		

F.A. pull station

F.A. audio/visual alarm

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O. Handicapped Access

Description: At the site, there is not 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 not an accessible route connecting all or most areas of the site. The exterior entrances are not ADA accessible. Access from the parking / drop-off area to the building entries is compromised by steps. Adequate handicap parking is not provided. Exterior doors are not equipped with ADA hardware. The main entry is not equipped with an ADA power assist door. Playground layout and equipping are not compliant. On the interior of the building, space allowances and reach ranges are not compliant. There is not an accessible route through the building. Ground and floor surfaces are compliant. This multistory building does not have a compliant elevator that accesses every floor. Access to the Stage is not facilitated by a chair lift. Interior doors are not fully recessed and are not provided adequate clearances. Some doors are provided with ADA-compliant hardware. ADA signage is not provided on both the interior and the exterior of the building.

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Signage:	$0.20	sq.ft. (of entire building addition)		Required	Required	$8,908.00	(per building area)
Ramps:	$40.00	sq.ft. (Qty)		200 Required		$8,000.00	(per ramp/interior-exterior complete)
Lifts:	$15,000.00	unit			1 Required	$15,000.00	(complete)
Elevators:	$42,000.00	each		3 Required		$126,000.00	(per stop, $84,000 minimum)
Electric Water Coolers:	$3,000.00	unit		3 Required	1 Required	$12,000.00	(new double ADA)
Toilet/Urinals/Sinks:	$3,800.00	unit		15 Required	5 Required	$76,000.00	(new ADA)
Toilet Partitions:	$1,000.00	stall		6 Required	2 Required	$8,000.00	(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		36 Required	4 Required	$200,000.00	(rework narrow opening to provide 3070 wood door, HM frame, door/light, includes hardware)
Provide ADA Shower:	$3,000.00	each		1 Required		$3,000.00	(includes fixtures, walls, floor drain, and supply line of an existing locker room)
Provide Toilet Accessories:	$1,000.00	per restroom		6 Required	2 Required	$8,000.00	
Sum:			$472,408.00	$409,693.80	$62,714.20		

Steep Ramp down to Basement

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P. Site Condition

Description: Harmar Elementary School is located in a small town setting on a medium sized parcel. Access is via public roads from southwest of the site. There is defined separation between bus traffic and other vehicular or pedestrian traffic. Buses stack on the public roads surrounding the western side of the building. Parking is adequate in number, and is available in both a parking lot and on the street. Visitor parking is not defined as separate from staff parking. An adequate amount of ADA parking stalls are provided but are not properly striped or signed. The paving is in new condition in the eastern lot, but the hard surface playground is cracked. Sidewalk is in moderate to good condition, but stairs are poor. There are no ADA access points to the building from the sidewalk. Playground equipment is in average condition. There are some drainage issues present on the site.

Rating: 3 Needs Replacement

Recommendations: A light overlay should be installed on the hard surface playground. Concrete stairs and sidewalk should be replaced where cracked and creating a trip hazard. Any clogged catch basins should be cleaned out and jetted. ADA parking stalls need to be restriped and a new compliant sign needs installed at 2 additional stalls. Additional parking is required. An ADA access route to the building must be installed. Playground equipment should be replaced where rusted or damaged. Existing cracked detectable warnings should be replaced.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Playground Equipment:	$1.50	sq.ft. (Qty)		35,969 Required	8,571 Required	$66,810.00	(up to $100,000, per sq.ft. of school)
Removal of existing Playground Equipment:	$2,000.00	lump sum		Required		$2,000.00	
Replace Existing Asphalt Paving (light duty):	$28.60	sq. yard		44 Required	11 Required	$1,573.00	(including drainage / tear out for light duty asphalt)
Asphalt Paving / New Wearing Course:	$19.00	sq. yard		2,261 Required	539 Required	$53,200.00	(includes minor crack repair in less than 5% of paved area)
Existing Parking Spaces	-$1,100.00	per unit		16 Required	4 Required	-$22,000.00	(subtract $1,100 per existing parking space)
Additional Parking Spaces Required for Elementary	$165.00	per student		287 Required	69 Required	$58,740.00	($1,500 per parking space; 0.11 space per elementary student. Parking space includes parking lot drive space.)
Bus Drop-Off for Elementary	$110.00	per student		323 Required	77 Required	$44,000.00	(**Number of students should be rounded up to the nearest 100.** $5500 per bus; 40 students per bus; 80% of elementary school students riding)
Concrete Sidewalk:	$5.00	sq.ft. (Qty)		888 Required	212 Required	$5,500.00	(5 inch exterior slab)
Exterior Hand / Guard Rails:	$43.00	ln.ft.		258 Required	62 Required	$13,760.00	
Replace Concrete Steps:	$32.00	sq.ft. (Qty)		382 Required	91 Required	$15,136.00	
Provide Concrete Dumpster Pad:	$2,400.00	each		1 Required		$2,400.00	(for two dumpsters)
Base Sitework Allowance for Unforeseen Circumstances	$50,000.00	allowance		Required		$50,000.00	Include this and one of the next two. (Applies for whole building, so only **one** addition should have this item)
Sitework Allowance for Unforeseen Circumstances for buildings between 0 SF and 100,000 SF	$1.50	sq.ft. (of entire building addition)		Required	Required	$66,810.00	Include this one **or** the next. (Each addition should have this item)
Other: ADA Parking Signage/Striping	$1,000.00	each		3 Required		$3,000.00	New compliant sign and striping
Other: Pavement Milling	$21.00	sq. yard		2,261 Required	539 Required	$58,800.00	Milling and removal of existing asphalt
Other: Provide detectable warnings	$500.00	each		2 Required		$1,000.00	ADA detectable warning
Other: Sewer Cleaning	$8.00	ln.ft.		162 Required	38 Required	$1,600.00	Clearing and jetting of pipe
Other: Site ADA Ramps	$1,000.00	each		1 Required		$1,000.00	Provide access to building
Sum:			$423,329.00	$353,344.40	$69,984.60		

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Q. Sewage System

Description: The sanitary sewer drains to a municipal system with no reported problems and is in good condition. There is a grease waste interceptor located in the basement below the kitchen that handles the kitchen grease waste from the 3-compartment sink.

Rating: 1 Satisfactory

Recommendations: No work required.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00		

Kitchen grease waste interceptor

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R. Water Supply

Description: The domestic water supply comes from a municipal system, which provides adequate pressure and capacity for the needs of the school. The service line was reportedly replaced 4-5 years ago. The water service is metered and there is a backflow preventer; however, the BFP does not meet current Code. The water piping is a combination of galvanized and copper pipes. The existing water supply does not have adequate capacity and pressure for the needs of the schools future fire suppression system.

Rating: 1 Satisfactory

Recommendations: Increase water service size for fire suppression which is included in the cost for the fire suppression system installation funded under Item U - Life Safety.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00		

Water meter & backflow preventer

Galvanized domestic water piping

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S. Exterior Doors

Description: The doors on the existing facility are all very old and utilize single pane glass

Rating: 3 Needs Replacement

Recommendations: Provide all new doors on the entire facility.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Door Leaf/Frame and Hardware:	$2,500.00	per leaf		12 Required	2 Required	$35,000.00	(includes removal of existing)
Sum:			$35,000.00	$30,000.00	$5,000.00		

Doors to Gym

Typical Exterior Door

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T. Hazardous Material

Description: The School District provided the AHERA three year reinspection reports, prepared by ASTAR and dated 10/2017, documenting known and assumed locations of asbestos and other hazardous materials.

Rating: 3 Needs Replacement

Recommendations: Remove all hazardous materials, inclusive of asbestos-containing materials in the overall facility, as noted in the attached Environmental Hazards Assessment.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Environmental Hazards Form				EHA Form	EHA Form	—	
Acoustical Panel/Tile Ceiling Removal	$3.00	sq.ft. (Qty)		0 Required	3,000 Required	$9,000.00	See J
Resilient Flooring Removal, Including Mastic	$3.00	sq.ft. (Qty)		8,100 Required	3,000 Required	$33,300.00	See J
Sum:			$42,300.00	$24,300.00	$18,000.00		

Gym VAT

Classroom VAT

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U. Life Safety

Description: The facility does not contain an automated fire suppression system. The stairwells are not enclosed. The handrails do not meet requirements. The kitchen hood is not equipped with a suppression system, but the kitchen is not used for food preparation (warming only).

Rating: 3 Needs Replacement

Recommendations: Provide facility with automated fire suppression system. Enclose the stairs to the rear of the building and provide all stairs with new hand/guard rails per OBBC code requirements.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
Sprinkler / Fire Suppression System:	$3.20	sq.ft. (Qty)		35,969 Required	8,571 Required	$142,528.00	(includes increase of service piping, if required)
Interior Stairwell Closure:	$5,000.00	per level		8 Required		$40,000.00	(includes associated doors, door frames and hardware)
Water Main	$50.00	ln.ft.		300 Required		$15,000.00	(new)
Handrails:	$5,000.00	level		16 Required		$80,000.00	
Other: Backflow preventer	$5,000.00	each		1 Required		$5,000.00	Backflow Preventer on New Sprinkler Service Line
Sum:			$282,528.00	$255,100.80	$27,427.20		

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V. Loose Furnishings

Description: The typical Classroom furniture is mismatched, and in generally poor to 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 3 due to observed conditions, and due to the fact that it lacks some of the Design Manual required elements.

Rating: 3 Needs Replacement

Recommendations: Provide for replacement of outdated or inadequate furniture.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
CEFPI Rating 0 to 3	$6.50	sq.ft. (of entire building addition)		Required	Required	$289,510.00	
Sum:			$289,510.00	$233,798.50	$55,711.50		

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W. Technology

Description: OSDM technology requirements are not met in this building. There are computers in many of the classrooms; there is a designated lab. Most classrooms have overhead projectors and Smart Boards.

Rating: 3 Needs Replacement

Recommendations: Provide technology upgrades, wiring and system per the OSDM guidelines.

Item	Cost	Unit	Whole Building	Original Building (1954) 35,969 ft²	Addition 1 (1955) 8,571 ft²	Sum	Comments
ES portion of building with total SF < 50,000	$14.00	sq.ft. (Qty)		35,969 Required	8,571 Required	$623,560.00	
Sum:			$623,560.00	$503,566.00	$119,994.00		

Classroom computer stations

Classroom smartboard

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X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		$7,308,827.70
7.00%	Construction Contingency	$511,617.94
Subtotal		$7,820,445.64
16.29%	Non-Construction Costs	$1,273,950.59
Total Project		**$9,094,396.23**

Construction Contingency	$511,617.94
Non-Construction Costs	$1,273,950.59
Total for X.	**$1,785,568.53**

Non-Construction Costs Breakdown		
Land Survey	0.03%	$2,346.13
Soil Borings / Phase I Envir. Report	0.10%	$7,820.45
Agency Approval Fees (Bldg. Code)	0.25%	$19,551.11
Construction Testing	0.40%	$31,281.78
Printing - Bid Documents	0.15%	$11,730.67
Advertising for Bids	0.02%	$1,564.09
Builder's Risk Insurance	0.12%	$9,384.53
Design Professional's Compensation	7.50%	$586,533.42
CM Compensation	6.00%	$469,226.74
Commissioning	0.60%	$46,922.67
Non-Construction Contingency (includes partnering and mediation services)	1.12%	$87,588.99
Total Non-Construction Costs	**16.29%**	**$1,273,950.59**

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School Facility Appraisal

Name of Appraiser	Laura Kretz	**Date of Appraisal**	2017-10-17
Building Name	Harmar Elementary School		
Street Address	100 Fort Square		
City/Town, State, Zip Code	Marietta, OH 45750		
Telephone Number(s)	740-374-6510		
School District	Marietta City SD		

Setting: Small City

Site-Acreage	4.00	Building Square Footage	44,540
Grades Housed	PK-5	Student Capacity	356
Number of Teaching Stations	26	Number of Floors	3
Student Enrollment	262		
Dates of Construction	1954,1955		

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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Suitability Appraisal of **1.0 The School Site** for Harmar Elementary School

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	*3*
The site is substantially smaller than OSDM requirements.		
1.2 **Site is easily accessible** and conveniently located for the present and future population	20	*8*
The site is contained within a "neighborhood redevelopment area." Being adjacent to the Ohio River makes the site difficult to access.		
1.3 **Location** is removed from undesirable business, industry, traffic, and natural hazards	10	*1*
The site is in a floodplain and surrounded by dilapidated houses.		
1.4 Site is **well landscaped and developed** to meet educational needs	10	*9*
The small site has several mature trees and is reasonably well landscaped.		
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*
The playground is well equipped and separated from traffic by fencing.		
1.6 **Topography** is varied enough to provide desirable appearance and without steep inclines	5	*4*
The site is flat with the building raised above the typical grade. There is a steep incline to the river, which is not accessible.		
1.7 Site has stable, well drained **soil free of erosion**	5	*3*
The only erosion was on the steep incline to the river.		
1.8 Site is suitable for **special instructional needs**, e.g., outdoor learning	5	
There is no designated area for special instruction on the site.		
1.9 **Pedestrian services** include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes	5	*5*
There are sidewalks that allow for sufficient access to the site.		
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	*1*
Parking is insufficient, and the condition of the asphalt is poor.		
TOTAL - 1.0 The School Site	100	*43*

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Suitability Appraisal of **2.0 Structural and Mechanical Features** for Harmar Elementary School

2.0 Structural and Mechanical Features	Points Allocated	Points
Structural		
2.1 Structure meets all **barrier-free** requirements both externally and internally	15	*3*
The building is not ADA accessible.		
2.2 **Roofs** appear sound, have positive drainage, and are weather tight	15	*5*
The various roofs are in poor condition. All roofs were installed over 7 years ago.		
2.3 **Foundations** are strong and stable with no observable cracks	10	*9*
The foundations are in good condition.		
2.4 **Exterior and interior walls** have sufficient expansion joints and are free of deterioration	10	*8*
There are sufficient expansion joints.		
2.5 **Entrances and exits** are located so as to permit efficient student traffic flow	10	*9*
There is an adequate amount of entrances and exits throughout the facility.		
2.6 **Building ''envelope''** generally provides for energy conservation (see criteria)	10	*3*
The windows are single paned and are in poor condition, and the doors lack the proper weather seals.		
2.7 Structure is **free of friable asbestos** and **toxic materials**	10	*4*
There is reported asbestos containing material (ACBM) in the flooring of both additions and in insulation in the boiler room of the original building.		
2.8 Interior walls permit sufficient **flexibility** for a variety of class sizes	10	*1*
The classrooms are uniform in size and the walls are constructed of concrete masonry units (CMU), which will make reconfiguration difficult.		

Mechanical/Electrical	Points Allocated	Points
2.9 **Adequate light sources** are well maintained, and properly placed and are not subject to overheating	15	*10*
Light sources are well maintained, properly placed and not subject to overheating. However, they lack the proper output lighting levels.		
2.10 **Internal water supply** is adequate with sufficient pressure to meet health and safety requirements	15	*13*
Water is supplied by a municipal utility and is adequate in both quality and pressure.		
2.11 Each teaching/learning area has adequate convenient **wall outlets**, phone and computer cabling for technology applications	15	*2*
There is not a sufficient number of electrical outlets, phone and computer cabling.		
2.12 **Electrical controls** are safely protected with **disconnect switches** easily accessible	10	*8*
Electrical controls are safely protected with disconnect switches that are easily accessible.		
2.13 **Drinking fountains** are adequate in number and placement, and are properly maintained including provisions for the disabled	10	*5*
The water fountains are adequate in number and placement. ADA accessibility is lacking.		
2.14 Number and size of **restrooms meet requirements**	10	*9*
The number of restroom fixtures meets the minimum requirements for boys and girls.		
2.15 **Drainage systems** are properly maintained and meet requirements	10	*8*
The drainage systems are in good working order. No problems were reported.		

2.16 **Fire alarms, smoke detectors, and sprinkler systems** are properly maintained and meet requirements	10	*2*
The building does not have a sprinkler system. All existing fire alarm components are properly maintained. The existing fire alarm system does not meet the current requirements.		
2.17 **Intercommunication system** consists of a central unit that allows dependable **two-way communication** between the office and instructional areas	10	*6*
There is a two-way communication system presented in the school.		
2.18 **Exterior water supply** is sufficient and available for normal usage	5	*3*
Exterior water connections are in place.		
TOTAL - 2.0 Structural and Mechanical Features	200	*108*

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Suitability Appraisal of **3.0 Plant Maintainability** for Harmar Elementary School

3.0 Plant Maintainability	Points Allocated	Points
3.1 **Windows, doors, and walls** are of material and finish requiring minimum maintenance	15	*2*
The exterior doors and windows are old and in poor condition.		
3.2 **Floor surfaces** throughout the building require minimum care	15	*13*
The halls and restrooms are terrazzo, and the classrooms have vinyl asbestos tile (VCT) and carpet.		
3.3 **Ceilings and walls** throughout the building, including service areas, are easily cleaned and resistant to stain	10	*8*
The walls throughout the facility are mostly glazed and painted concrete masonry units (CMU). The ceilings are typically acoustic ceiling tile (ACT), with some open structure in the gym and boiler room.		
3.4 **Built-in equipment** is designed and constructed for ease of maintenance	10	*2*
There is not enough storage equipment nor are they easily maintained.		
3.5 **Finishes and hardware**, with compatible keying system, are of durable quality	10	*1*
The hardware is not ADA compliant and the finishes are in need of replacement.		
3.6 **Restroom fixtures** are wall mounted and of quality finish	10	*2*
The toilets are floor mounted, and the urinals are wall mounted. All fixtures, except urinals, are in poor condition.		
3.7 Adequate **custodial storage space** with water and drain is accessible throughout the building	10	*8*
The facility has custodial space on each floor in adequate locations.		
3.8 Adequate **electrical outlets and power**, to permit routine cleaning, are available in every area	10	*6*
Enough electrical outlets are in place to permit routine cleaning.		
3.9 **Outdoor light fixtures, electrical outlets**, equipment, and other fixtures are accessible for repair and replacement	10	*8*
The outdoor fixtures are accessible with an extension ladder.		
TOTAL - 3.0 Plant Maintainability	100	*50*

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Suitability Appraisal of **4.0 Building Safety and Security** for Harmar Elementary School

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	*2*
The student loading area is on a street side.		
4.2 **Walkways**, both on and offsite, are available for safety of pedestrians	10	*4*
Walkways at parking are not adequate		
4.3 **Access streets** have sufficient signals and signs to permit safe entrance to and exit from school area	5	*1*
There are not sufficient signals or signs for the school area.		
4.4 **Vehicular entrances and exits** permit safe traffic flow	5	*2*
The parking lot is difficult to traverse. There is only one access point.		
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*
The playground is fenced, adjacent to the building and has appropriate ground cover.		
Building Safety	Points Allocated	Points
4.6 **The heating unit(s)** is located away from student occupied areas	20	*16*
The mechanical room with boilers is located directly off of the main corridor, adjacent to classrooms.		
4.7 Multi-story buildings have at least **two stairways** for student egress	15	*13*
There are at least two stairs on each floor. However, they are not enclosed.		
4.8 **Exterior doors** open outward and are equipped with panic hardware	10	*7*
Exterior doors are properly equipped and all open outward.		
4.9 **Emergency lighting** is provided throughout the entire building with exit signs on separate electrical circuits	10	*10*
Emergency lighting is provided throughout the building with exit signs on separate electrical circuits.		
4.10 **Classroom doors** are recessed and open outward	10	*5*
The classroom doors open outward, but are not recessed.		
4.11 **Building security systems** are provided to assure uninterrupted operation of the educational program	10	*7*
The building security system assures uninterrupted operation of the educational program.		
4.12 **Flooring** (including ramps and stairways) is maintained in a non-slip condition	5	*5*
All flooring is being properly maintained.		
4.13 **Stair risers** (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16	5	*5*
The stair risers meet code requirements.		
4.14 **Glass** is properly located and protected with wire or safety material to prevent accidental student injury	5	*5*
No problems with any glass were noted.		
4.15 **Fixed Projections** in the traffic areas do not extend more than eight inches from the corridor wall	5	*5*
No fixed projections were noted.		

4.16 **Traffic areas** terminate at an exit or a stairway leading to an egress	5	*5*
All traffic areas terminate at an exit or stair leading directly to an exit.		

Emergency Safety	Points Allocated	Points
4.17 Adequate **fire safety equipment** is properly located	15	*8*
A ceiling sprinkler system is not provided. There are not sufficient horn/strobe units in the building. There are pull stations at all exits.		
4.18 There are at least **two independent exits** from any point in the building	15	*14*
There are at least two means of egress from every location in the building.		
4.19 **Fire-resistant materials** are used throughout the structure	15	*13*
Generally the building is made of fire-resistant materials. However, the doors, trim, and casework are all of wood construction.		
4.20 Automatic and manual **emergency alarm system** with a distinctive sound and flashing light is provided	15	*13*
Automatic and manual emergency alarm system with distinctive sound and flashing light is provided.		

TOTAL - 4.0 Building Safety and Security	200	*145*

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Suitability Appraisal of **5.0 Educational Adequacy** for Harmar Elementary School

5.0 Educational Adequacy	Points Allocated	Points
Academic Learning Space		
5.1 **Size of academic learning areas** meets desirable standards	25	*14*
The classrooms are undersized per OSDM requirements.		
5.2 **Classroom space** permits arrangements for small group activity	15	*9*
There is limited space for small group activities.		
5.3 **Location of academic learning areas** is near related educational activities and away from disruptive noise	10	*7*
The core learning areas are grouped away from the gymnasium/cafeteria.		
5.4 **Personal space** in the classroom away from group instruction allows privacy time for individual students	10	
There is no personal space available.		
5.5 **Storage for student materials** is adequate	10	*4*
Storage for student materials is inadequate.		
5.6 **Storage for teacher materials** is adequate	10	*2*
Storage for teacher materials is inadequate.		
Special Learning Space	Points Allocated	Points
5.7 **Size of special learning area(s)** meets standards	15	*9*
All special learning areas are undersized.		
5.8 **Design of specialized learning area(s)** is compatible with instructional need	10	*6*
The specialized learning areas are lacking the proper area and storage.		
5.9 **Library**/**Resource**/**Media Center** provides appropriate and attractive space	10	*8*
The library is appropriately sized, but is in need of new furniture.		
5.10 **Gymnasium (or covered P.E. area)** adequately serves physical education instruction	5	*4*
The gymnasium is adequate in size to serve the educational needs of the students.		
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	*8*
The kindergarten room is appropriate for the age of the students and nature of the instruction.		
5.12 **Music Program** is provided adequate sound treated space	5	*1*
The music program is housed in a non-sound treated space.		
5.13 **Space for art** is appropriate for special instruction, supplies, and equipment	5	*3*
The room in which the art classes are housed is too small and lacks adequate storage.		
School Facility Appraisal	Points Allocated	Points
5.14 **Space for technology education** permits use of state-of-the-art equipment	5	*5*
There is a well equipped and appropriately sized computer lab within the building.		
5.15 Space for **small groups and remedial instruction** is provided adjacent to classrooms	5	*2*

Little area is provided for small groups.

5.16 **Storage for student and teacher material** is adequate	5	*1*

Storage throughout is inadequate.

Support Space	Points Allocated	Points
5.17 **Teacher's lounge and work areas** reflect teachers as professionals	10	*3*

The teachers' lounge is housed in a small room. There are minimal amenities, and the furniture is in poor condition.

5.18 **Cafeteria/Kitchen** is attractive with sufficient space for seating/dining, delivery, storage, and food preparation	10	*6*

The kitchen is undersized with minimal equipment. The gymnasium doubles as the dining area and is large enough for the facility.

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

The offices are undersized and there is no privacy available. The furnishings are of fair quality and condition.

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

The counselor's office is remotely located from the administration's offices.

5.21 **Clinic** is near administrative offices and is equipped to meet requirements	5	*4*

The clinic is well located and equipped. However, proper storage area is lacking.

5.22 **Suitable reception space** is available for students, teachers, and visitors	5	*1*

There is little reception space available in the small administration area.

5.23 **Administrative personnel** are provided **sufficient work space and privacy**	5	*2*

The overall administration space is small and affords little privacy.

TOTAL - 5.0 Educational Adequacy	200	*105*

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Suitability Appraisal of **6.0 Environment for Education** for Harmar Elementary School

6.0 Environment for Education	Points Allocated	Points
Exterior Environment		
6.1 Overall **design is aesthetically pleasing** to age of students	15	*11*
The school is well sited, and the overall appearance of the building is pleasing.		
6.2 Site and building are **well landscaped**	10	*8*
The landscaping is original to the building and would benefit from additional planting and architectural features.		
6.3 **Exterior noise and poor environment** do not disrupt learning	10	*7*
There is great potential for environment disruptions as a result of the neighborhood and adjacent rivers.		
6.4 **Entrances and walkways** are **sheltered** from sun and inclement weather	10	*3*
The entrances have small overhangs that are in fair to poor condition and ineffective. The walkways are not sheltered.		
6.5 **Building materials** provide attractive color and texture	5	*3*
There is a nice contrast between the brick and the stone of the building.		
Interior Environment	Points Allocated	Points
6.6 **Color schemes, building materials, and decor** provide an impetus to learning	20	*12*
The interior colors are neutral: off white, tan and white. Wood doors add warmth, and the individual classrooms are brightly decorated with student work and educational materials. There are no accent colors.		
6.7 **Year around comfortable temperature and humidity** are provided throughout the building	15	*9*
The heating system performs adequately to keep the building heated. The facility is not capable of keeping cool and does not have any means of humidity control.		
6.8 **Ventilating system** provides adequate quiet circulation of clean air and meets 15cfm VBC requirement	15	
Ventilation air is not provided for the facility. The unit ventilators are equipped with outside air intakes, but the dampers are inoperable and the louvers are blocked off.		
6.9 **Lighting system** provides proper intensity, diffusion, and distribution of illumination	15	*4*
The lighting system does not provide proper intensity, diffusion or distribution of illumination.		
6.10 **Drinking fountains and restroom facilities** are conveniently located	15	*13*
Drinking fountains and restrooms are well located.		
6.11 **Communication among students** is enhanced by commons area(s) for socialization	10	*8*
Commons area are limited to the hallways, playground and lunchroom/gymnasium.		
6.12 **Traffic flow** is aided by appropriate foyers and corridors	10	*8*
The straight, wide corridors aid traffic flow.		
6.13 **Areas for students to interact** are suitable to the age group	10	*9*
All areas for student interaction are easily supervised and are suitable to the age group.		
6.14 **Large group areas are designed** for effective management of students	10	*9*
The large group areas function properly.		
6.15 **Acoustical treatment** of ceilings, walls, and floors provides effective sound control	10	*8*
The concrete floors and ceilings, and the concrete masonry unit (CMU) walls stop sound transmission between classes. However, there is also a fair amount of reverberation as a result of the solid materials.		

6.16 **Window design** contributes to a pleasant environment	10	*1*
The windows are unsightly, drafty and are single-paned.		
6.17 **Furniture and equipment** provide a pleasing atmosphere	10	*3*
The furniture is in fair to poor condition.		
TOTAL - 6.0 Environment for Education	200	*116*

LEED Observation Notes

School District:	Marietta City SD
County:	Washington
School District IRN:	44321
Building:	Harmar Elementary School
Building IRN:	15297

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

Building Name and Level: **Harmar Elementary School**

PK-5

Building features that clearly exceed criteria:

1. The building has adequate technology.
2. The playground equipment is in good condition.
3. It is an attractive building, well placed on a beautiful site.
4.
5.
6.

Building features that are non-existent or very inadequate:

1. The building is in a flood plain.
2. There is a fair amount of asbestos containing building material (ACBM).
3. There is no fire suppression system.
4. Air conditioning is not provided.
5. The windows and doors are old and in poor condition.
6.

Back to Assessment Summary

Environmental Hazards Assessment Cost Estimates

Owner:	Marietta City SD
Facility:	Harmar Elementary School
Date of Initial Assessment:	Oct 17, 2017
Date of Assessment Update:	Dec 19, 2017
Cost Set:	2019

District IRN:	44321
Building IRN:	15297
Firm:	Schorr Architects, Inc.

Scope remains unchanged after cost updates.

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1954 Original Building	35,969	$24,300.00	$24,300.00
1955 Addition 1	8,571	$18,000.00	$18,000.00
Total	44,540	$42,300.00	$42,300.00
Total with Regional Cost Factor (101.86%)	—	$43,086.78	$43,086.78
Regional Total with Soft Costs & Contingency	—	$53,613.01	$53,613.01

Environmental Hazards - Marietta City SD (44321) - Harmar Elementary School (15297) - Original Building

Owner:	Marietta City SD	**Bldg. IRN:**	15297
Facility:	Harmar Elementary School	**BuildingAdd:**	Original Building
Date On-Site:		**Consultant Name:**	

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

	ACM Found	Status	Quantity	Unit Cost	Estimated Cost
1.	Boiler/Furnace Insulation Removal	Not Present	0	$10.00	$0.00
2.	Breeching Insulation Removal	Not Present	0	$10.00	$0.00
3.	Tank Insulation Removal	Not Present	0	$8.00	$0.00
4.	Duct Insulation Removal	Not Present	0	$8.00	$0.00
5.	Pipe Insulation Removal	Not Present	0	$10.00	$0.00
6.	Pipe Fitting Insulation Removal	Not Present	0	$20.00	$0.00
7.	Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	$12.00	$0.00
8.	Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	$30.00	$0.00
9.	Pipe Insulation Removal (Hidden in Walls/Ceilings)	Not Present	0	$15.00	$0.00
10.	Dismantling of Boiler/Furnace/Incinerator	Not Present	0	$2,000.00	$0.00
11.	Flexible Duct Connection Removal	Not Present	0	$100.00	$0.00
12.	Acoustical Plaster Removal	Not Present	0	$7.00	$0.00
13.	Fireproofing Removal	Not Present	0	$25.00	$0.00
14.	Hard Plaster Removal	Not Present	0	$7.00	$0.00
15.	Gypsum Board Removal	Not Present	0	$6.00	$0.00
16.	Acoustical Panel/Tile Ceiling Removal	Not Present	0	$3.00	$0.00
17.	Laboratory Table/Counter Top Removal	Not Present	0	$100.00	$0.00
18.	Cement Board Removal	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	8100	$3.00	$24,300.00
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	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**			$24,300.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$24,300.00

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.	35969	0	$0.10	$0.00

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**	$24,300.00
2.	A36, B1, D1, and E2	**Total Cost for Env. Hazards Work - Demolition**	$24,300.00

* 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.

Environmental Hazards - Marietta City SD (44321) - Harmar Elementary School (15297) - Addition 1

Owner:	Marietta City SD	**Bldg. IRN:**	15297
Facility:	Harmar Elementary School	**BuildingAdd:**	Addition 1
Date On-Site:		**Consultant Name:**	

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

	ACM Found	Status	Quantity	Unit Cost	Estimated Cost
1.	Boiler/Furnace Insulation Removal	Not Present	0	$10.00	$0.00
2.	Breeching Insulation Removal	Not Present	0	$10.00	$0.00
3.	Tank Insulation Removal	Not Present	0	$8.00	$0.00
4.	Duct Insulation Removal	Not Present	0	$8.00	$0.00
5.	Pipe Insulation Removal	Not Present	0	$10.00	$0.00
6.	Pipe Fitting Insulation Removal	Not Present	0	$20.00	$0.00
7.	Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	$12.00	$0.00
8.	Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	$30.00	$0.00
9.	Pipe Insulation Removal (Hidden in Walls/Ceilings)	Not Present	0	$15.00	$0.00
10.	Dismantling of Boiler/Furnace/Incinerator	Not Present	0	$2,000.00	$0.00
11.	Flexible Duct Connection Removal	Not Present	0	$100.00	$0.00
12.	Acoustical Plaster Removal	Not Present	0	$7.00	$0.00
13.	Fireproofing Removal	Not Present	0	$25.00	$0.00
14.	Hard Plaster Removal	Not Present	0	$7.00	$0.00
15.	Gypsum Board Removal	Not Present	0	$6.00	$0.00
16.	Acoustical Panel/Tile Ceiling Removal	Reported Asbestos-Containing Material	3000	$3.00	$9,000.00
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	Reported Asbestos-Containing Material	3000	$3.00	$9,000.00
30.	Carpet Mastic Removal	Not Present	0	$2.00	$0.00
31.	Carpet Removal (over RFC)	Not Present	0	$1.00	$0.00
32.	Acoustical Tile Mastic Removal	Not Present	0	$3.00	$0.00
33.	Sink Undercoating Removal	Not Present	0	$100.00	$0.00
34.	Roofing Removal	Not Present	0	$2.00	$0.00
35.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Renovation Work**			$18,000.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$18,000.00

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.	8571	0	$0.10	$0.00

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**	$18,000.00
2.	A36, B1, D1, and E2	**Total Cost for Env. Hazards Work - Demolition**	$18,000.00

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

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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.