## MADISON COUNTY SCHOOLS - NEEDS ASSESSMENTS









### **OVERVIEW**

Process and Principles



#### **Goals and Objectives**

- Extend & Enhance Campus Service Life
- Improve the Learning Environment
- Minimize Operational Disturbance
- Maximize Budget Efficiency

#### **Building Priorities**

- Building Shell Maintenance & Repair
- Address MEP + FP Systems Concerns
- Upgrade Life Safety Features
- Improve Accessibility

#### **Process**

- Discussions with Operations & Maintenance
- Campus Tours
- Scope Analysis and Pricing
- Capitalize on Recent Renovation Experience

### **OVERVIEW**

Proposed Projects



### **Madison High Stadium Improvements**

- \$3,801,355.00
- New Home Side Grandstands and concourse
- New Field turf (now installed)
- Track resurfacing

#### **Madison High School**

- \$13,062,471.80
- Critical and High Priority Items on Campus

#### **Madison Middle School**

- \$6,398,455.42
- Critical and High Priority Items on Campus

### **Mars Hill Elementary School**

- \$3,378,861.45
- Critical and High Priority Items on Campus

## Mars Hill Elementary School 4 Classroom Addition

- \$2,318,400.00
- Proposed Additional classroom layout

#### **Brush Creek Elementary School**

- \$276,784.97
- Critical and High Priority Items on Campus

#### **Hot Springs Elementary School**

- \$872,572.88
- Critical and High Priority Items on Campus

## **CAMPUS BREAKDOWN**

Critical & High Priority Needs





**Madison County Schools Renovations** 

			Critical Needs A	Assessment 2021-22				
Campus/ Description	Number	Units	Unit Cost	Const Cost	Escalation Contingency (Dec - 2021)	Const. Cost + Escalation	A/E Design	Project Cost
BREAKDOWN BY CAMPUS								
MADISON HIGH SCHOOL STADIUM - TOTAL				\$2,886,110.00	\$561,500.00	\$3,447,610.00	\$353,745.00	\$3,801,355.00
MADISON HIGH SCHOOL - CRITICAL NEEDS				\$6,989,673.44	\$1,397,934.69	\$8,387,608.13	\$671,008.65	\$9,058,616.78
MADISON HIGH SCHOOL - HIGH PRIORITY NEEDS				\$2,891,916.36	\$578,383.27	\$3,707,273.17	\$296,581.85	\$4,003,855.02
MADISON HIGH SCHOOL - TOTAL				\$9,881,589.80	\$1,976,317.96	\$12,094,881.30	\$967,590.50	\$13,062,471.80
MADISON MIDDLE SCHOOL - CRITICAL NEEDS				\$3,538,745.00	\$707,749.00	\$4,246,494.00	\$339,719.52	\$4,586,213.52
MADISON MIDDLE SCHOOL - HIGH PRIORITY NEEDS				\$1,398,334.80	\$279,666.96	\$1,678,001.76	\$134,240.14	\$1,812,241.90
MADISON MIDDLE - TOTAL				\$4,937,079.80	\$987,415.96	\$5,924,495.76	\$473,959.66	\$6,398,455.42
MARS HILL ELEMENTARY SCHOOL - CRITICAL NEEDS				\$998,027.91	\$199,605.58	\$1,197,633.49	\$95,810.68	\$1,293,444.17
MARS HILL ELEMENTARY SCHOOL - HIGH PRIORITY NEEDS				\$1,609,118.27	\$321,823.65	\$1,930,941.92	\$154,475.35	\$2,085,417.28
MARS HILL ELEMENTARY SCHOOL - TOTAL				\$2,607,146.18	\$521,429.24	\$3,128,575.42	\$250,286.03	\$3,378,861.45
MARS HILL ELEMENTARY 4 CLASSROOM ADDITION- TOTAL				\$1,800,000.00	\$270,000.00	\$2,142,450.00	\$175,950.00	\$2,318,400.00
BRUSH CREEK ELEMENTARY - TOTAL				\$213,568.65	\$42,713.73	\$256,282.38	\$20,502.59	\$276,784.97
DROSH CREEK ELEWIENTARY - TOTAL				<b>3213,300.03</b>	<b>342,/13./3</b>	<b>3430,404.38</b>	32U,3U2.39	\$276,784.97
HOT SPRINGS ELEMENTARY - TOTAL				\$673,281.54	\$134,656.31	\$807,937.85	\$64,635.03	\$872,572.88
TOTAL				\$22,998,775.97	\$4,494,033.19	\$27,802,232.70	\$2,306,668.82	\$30,108,901.52

## CAMPUS IMPROVEMENT

**Madison High School** – Stadium Improvements







							Escalation Contingency	Const. Cost +	A/E	
Cam	npus/ Description	Number	Units	U	Init Cost	<b>Const Cost</b>	(Dec - 2021)	<b>Escalation</b>	Design	<b>Project Cost</b>
	ison High School Football Stadium ovements								_	·
	eplacement to Perimeter Edge of Track (SYd)	12,000	Syd	\$	29.17 \$	· · · · · · · · · · · · · · · · · · ·		\$ 420,000.00		\$420,000.00
	Grandstands Home Side (seats)	1,600	Seats	\$	400.00 \$	,	· ·	\$ 768,000.00		\$768,000.00
	Level Concourse (SF)	10,300	SF	\$	7.77 \$	80,000.00	\$ 16,000.00	\$ 96,000.00		\$96,000.00
	ce Storm Drain System at Upper Concourse and add									
	F of New Water and Sewer service to serve Press					400,000,00	¢ 25,000,00	Å 24.5 000 00		¢245 000 00
Box	Cid- B-t-inin- Well and Conserve (CE)	4.500	SF	_	45.50	180,000.00		\$ 216,000.00		\$216,000.00
	rs Side Retaining Wall and Concourse (SF) num Visitor Bleachers (seats)	4,500 500	Seats	\$ \$	15.56 \$ 150.00 \$			\$ 84,000.00 \$ 90,000.00		\$84,000.00 \$90,000.00
	face Track (SF)	46,500	SF	\$	9.68			\$ 540,000.00		\$540,000.00
	nkment Improvements	40,300	31	\$	100,000.00			\$ 120,000.00		\$120,000.00
	isting Rock Retaining Walls	1		\$	250,000.00 \$			\$ 300,000.00		\$300,000.00
5.5 THIEX	isting Nock Netaning Wans	-		,	250,000.00 ↓	250,000.00	30,000.00	300,000.00		\$300,000.00
Subto	otal - Stadium Improvements				\$	1,845,000.00	\$ 369,000.00	\$ 2,214,000.00		\$2,214,000.00
Madi	ison High School New Press Box									
9.0 Base I	Building	2,500	SF	\$	200.00	500,000.00	\$ 100,000.00	\$ 600,000.00		\$600,000.00
10.0 Plumb				\$	20.00	50,000.00		\$ 60,000.00		\$60,000.00
11.0 HVAC				\$	25.00 \$	62,500.00		\$ 75,000.00		\$75,000.00
12.0 Electri	ical			\$	30.00 \$	75,000.00	\$ 15,000.00	\$ 90,000.00		\$90,000.00
					(275/sf total)					
Subto	otal - Press Box				\$	687,500.00	\$ 137,500.00	\$ 825,000.00		\$825,000.00
New	Bus Loop and Overflow Parking									
42 Gradin	ng, Storm, Sub-base, Curb & Gutter, Walks, Paving &									
13.0 Stripin		37,800	SF	\$	7.28 \$	275,000.00	\$ 55,000.00	\$ 330,000.00		\$330,000.00
Subto	otal - New Bus Loop and Overflow Parking				Ś	275,000.00	\$ 55,000.00	\$ 330,000.00		\$330,000.00
							, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , , ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Subto	otal - PHYSICAL CONSTRUCTION				\$	2,807,500.00	\$ 561,500.00	\$ 3,369,000.00		\$3,369,000.00
Tost	ing Sorvices Tonographical Survey									
14.0	ing Services, Topographical Survey,					70.640				70.610
Build	ling and Construction Permits					78,610				78,610
Subto	otal - Testing Services, Topographical Survey,									
	ng and Construction Permits				\$	78,610.00		\$ 78,610.00		\$78,610.00
Civil	Structural, Architectural, Plumbing,									
	hanical & Electrical Design Fees								353,745	;
Subto	otal - Civil, Structural, Architectural, Plumbing,									
Mech	anical & Electrical Design Fees							\$	353,745.00	\$ 353,745.00
	L MADISON HIGH SCHOOL FOOTBALL STADIUM									1-
IMPR	OVEMENTS				\$	2,886,110.00	\$ 561,500.00	\$ 3,447,610.00 \$	353,745.00	\$3,801,355.00

Madison High School – Critical & High Priority Needs







	Campus/ Description		Number	Units	U	nit Cost	Const Cost	Escalati Continge (Dec - 20	ncy		Cost +	C	A/E Design	Project Cost
	MADISON HIGH SCHOOL Size - 144,158 sf Original Building 1972 - Building age - 48 years (LL-Gym/Band/Art) 23,225 + (LL-Occupational - 1 Science Wing Addition 2008 - Building Age - 12 y		) + (UL) 92,707				130,817 13,341 <u>144,158</u>							
	Exterior Envelope - Critical													
1.0	Replace Existing Roof membrane with new TPO atop 1/2" HD recovery board.	EE	90,984	sf	\$	6.77	\$ 615,961.68	\$ 12	3,192.34	\$	739,154.02	\$	59,132.32	\$798,286.34
2.0	Demolish existing elevated concrete balcony deck outside cafeteria	EE	1,009	sf	\$	75.00	\$ 75,675.00	\$ 1	5,135.00	\$	90,810.00	\$	7,264.80	\$98,074.80
3.0	Replace existing elevated concrete balcony deck outside cafeteria	EE	1,009	sf	\$	150.00	\$ 151,350.00	\$ 3	0,270.00	\$	181,620.00	\$	14,529.60	\$196,149.60
	Mechanical - Critical													
4.0	Replace HVAC Hydronic Piping, upgrade to 4 pipe system	M	130,817	sf	\$	27.88	\$ 3,647,177.96	\$ 72	9,435.59	\$ 4	1,376,613.55	\$	350,129.08	\$4,726,742.64
5.0	Reset Air intake	M	1	ea.	\$	3,000.00	\$ 3,000.00	\$	600.00	\$	3,600.00	\$	288.00	\$3,888.00
6.0	Replace Chiller	M	185	ton	\$	1,174.00	\$ 217,190.00	\$ 4	3,438.00	\$	260,628.00	\$	20,850.24	\$281,478.24
7.0	Replace Boiler (w/ new Propane fired)	M	1	ea.	\$	188,000.00	\$ 188,000.00	\$ 3	7,600.00	\$	225,600.00	\$	18,048.00	\$243,648.00
8.0	Change valves to pneumatic control	M	130,817	sf	\$	5.00	\$ 654,085.00	\$ 13	0,817.00	\$	784,902.00	\$	62,792.16	\$847,694.16
9.0	Change controls to Metasys (4 yrs. remain on Johnson Controls contract)	M	130,817	sf	\$	5.01	\$ 655,393.17	\$ 13	1,078.63	\$	786,471.80	\$	62,917.74	\$849,389.55
	Plumbing - Critical													
10.0	Thoroughly analyze existing sewer line capacity-evaluate problem areas and what needs replacement	Р	1	ea.	\$	5,000.00	\$ 5,000.00	\$	1,000.00	\$	6,000.00	\$	480.00	\$6,480.00
	Other Interior - Critical													
11.0	Acoustic Tile and grid throughout building	0	130,817	sf	\$	5.79	\$ 757,430.43	\$ 15	1,486.09	\$	908,916.52	\$	72,713.32	\$981,629.84
12.0	New Vents and Registers (estimated)	0	172	ea.	\$	112.85	\$ 19,410.20	\$	3,882.04	\$	23,292.24	\$	1,863.38	\$25,155.62
	Subtotal - Critical Needs						\$ 6,989,673.44	\$ 1,39	7,934.69	\$ 8	3,387,608.13	\$	671,008.65	\$9,058,616.78

					•		ools Renovations	;					
				Crit	ical Needs	Asse	essment 2021-22						
Site - High Priority													
.0 Site Sewer Cast Iron Line Replacement	S		lf			\$		\$ -	\$		\$	-	\$0.
0 Sidewalks		24,123	sf	\$	10.00	\$	241,230.00	\$ 48,246.00	\$ 289	,476.00	\$	23,158.08	\$312,634.
Exterior Envelope - High Priority													
.0 Foundation Waterproofing Repairs	EE	1,620	lf	\$	23.20	\$	37,584.00	\$ 7,516.80	\$ 45	,100.80	\$	3,608.06	\$48,708.
.0 Storefront door replacement at Cafeteria	EE	4	leaf	\$	2,998.00	\$	11,992.00	\$ 2,398.40	\$ 14	,390.40	\$	1,151.23	\$15,541.
.0 Storefront glazing replacement at Cafeteria - includes demo of existing windows and frames	EE	923	ff	\$	88.84	\$	81,999.32	\$ 16,399.86	\$ 98	,399.18	\$	7,871.93	\$106,271.
.0 Storefront door replacement at exit off courtyard	EE	2	leaf	\$	2,998.00	\$	5,996.00	\$ 1,199.20	\$ 7	195.20	\$	575.62	\$7,770.
.0 Storefront glazing replacement at exit off Courtyard	EE	106	If	\$	88.84	\$	9,417.04	\$ 1,883.41	\$ 11	,300.45	\$	904.04	\$12,204.
O Storefront glazing replacement at Courtyard perimeter - includes demo of existing windows and frames	EE	1,586	If	\$	126.05	\$	199,895.02	\$ 39,979.00	\$ 239	,874.02	\$	19,189.92	\$259,063.
O Adjust existing Storefront exit where doors are sticking near Courtyard	EE	2	ea.	\$	100.00	\$	200.00	\$ 40.00	\$	240.00	\$	19.20	\$259.
.0 Replace existing Door Exiting Hardware	EE	2	ea.	\$	1,800.00	\$	3,600.00	\$ 720.00	\$ 4	,320.00	\$	345.60	\$4,665
Remove and Replace Gutters and Downspouts throughout, 33 If of gutter (stairs) + 36 If of downspout	EE	69	If	\$	35.03	\$	2,417.07	\$ 483.41	\$ 239	,874.02	\$	19,189.92	\$259,063.
In Electronics room and adjacent room, far wall that is also a retaining will starting to have leaks/moisture issues. Once foundation repairs are made, prep and	EE												
repaint		616	sf	\$	1.28	\$	788.48	\$ 157.70	\$	946.18	\$	75.69	\$1,021
Library - leaks in parapet wall above. Once roof is or recovered, should alleviate problem - replace ceiling tiles - see Other Interior - Critical	EE							A			<u>,</u>		ćo
								-			<b>&gt;</b>	- ·	\$0
Mechanical - High Priority O Air Condition Gymnasium	M	10,292	sf	Ś	37.62	\$	387,185.04	\$ 77,437.01	\$ 464	,622.05	\$	37,169.76	\$501,791
.0 Evaluate and most likely replace exhaust fans on roof	M	14	ea.	¢	3,159.00		44,226.00	,	,	,071.20		4,245.70	\$57,316
Replace unit ventilator by courtyard and elevator	M	1	ea.	Ś	3,500.00		3,500.00		i i	,200.00		336.00	\$4,536
Library mechanical room - all air handling units are				7	0,000.00	7	5,500.00	700.00	Ť	,,	7		Ç.,550
0 original-assess and service - well past their life	M	2	93	ė	300 00	¢	600.00	\$ 130.00	¢	720 00	¢	57 60	\$777
expectancy		2	ea.	\$	300.00	\$	600.00	\$ 120.00	\$	720.00	\$	57.60	:

							nools Renovations essment 2021-22					
Electrical - High Priority												
Replace existing T8 lighting with LED throughout (estimate 1 fixture per 204 sf)	Е	641	ea.	\$	538.00	\$	344,858.00	\$ 68,971.60	\$ 413,829.60	) \$	33,106.37	\$446,935.97
31.0 Replace Auditorium lighting - part of replacement estimate above	E							\$ -		Ś	_	\$0.00
32.0 New Propane Generator (50kW-60kW)	E	1	ea.	\$	75,000.00	\$	75,000.00	'	\$ 90,000.00	) \$	7,200.00	\$97,200.00
33.0 New Breaker Panels off Gym	Е	2	ea.	\$	3,846.00	\$	7,692.00			) \$	738.43	\$9,968.83
34.0 Replace Breaker Panels in electronics room	E	6	ea.	\$	3,846.00	\$	23,076.00	\$ 4,615.20	\$ 27,691.20	) <b>\$</b>	2,215.30	\$29,906.50
35.0 Replace existing campus switch gear	Е	1	ea.	\$	20,000.00	\$	20,000.00	\$ 4,000.00	\$ 24,000.00	<b>)</b> \$	1,920.00	\$25,920.00
36.0 Renovate elevator closet/Janitor closet	E	64	sf	\$	195.00	\$	12,480.00	\$ 2,496.00	\$ 14,976.00	) <b>\$</b>	1,198.08	\$16,174.08
37.0 Replace aging transformer in janitor closet (near elevator), add conditioning to room	Е	1	ea.	\$	7,000.00	\$	7,000.00	\$ 1,400.00	\$ 8,400.00	) \$	672.00	\$9,072.00
38.0 Replace existing electric panels in janitor closet (near elevator)	Е	3	ea.	\$	3,846.00	\$	11,538.00	\$ 2,307.60	\$ 13,845.60	) <b>\$</b>	1,107.65	\$14,953.25
39.0 Replace aging transformer, add conditioning to room (off electronics room)	E	1	ea.	\$	7,000.00	\$	7,000.00				672.00	\$9,072.00
40.0 Replace aging transformers throughout campus, one in each electric room	E	4	ea.	\$	5,000.00	\$	20,000.00	\$ 4,000.00	\$ 24,000.00	) <b>\$</b>	1,920.00	\$25,920.00
41.0 Add receptacles to rooms - most classrooms have only one receptacle in the room	E	19,595	sf	\$	10.00	\$	195,950.00			) \$	18,811.20	\$253,951.20
Plumbing - High Priority	P		16	^	40.77			<u> </u>	<u> </u>			¢0.00
42.0 Replace Pipe Insulation 43.0 Kitchen - Water and Sewer renovations	P	2.252	lf sf	\$ \$	18.77	۲.	CE C2E 17	\$ -	\$ -	\$	-	\$0.00
44.0 Kitchen Renovations (Major)	P	2,353 2,353	sf	\$ \$	27.89 194.67		65,625.17 458,058.51		\$ 78,750.20 \$ 549,670.22		6,300.02 43,973.62	\$85,050.22 \$593,643.83
Lower level women's toilet near electronics room - major	-	2,333	31	٠	134.07	۲	438,038.31	31,011.70	343,070.2.	. J	43,973.02	<i>333</i> 3,043.83
leaks in wall/ceiling - needs to be renovated	Р	333	sf	Ś	195.00	Ś	64,935.00	\$ 12,987.00	\$ 77,922.00	n \$	6,233.76	\$84,155.76
46.0 Evaluate drain lines in transformer room	Р	1	ea.	\$	200.00		200.00				19.20	\$259.20
Life Safety Upgrades - High Priority												
47.0 Stairway guardrails	LS	72	lf	\$	325.00	\$	23,400.00	\$ 4,680.00	\$ 28,080.00	) \$	2,246.40	\$30,326.40
48.0 Stairway wall mounted handrails	LS	182	lf	\$	207.00			\$ -		\$	-	\$0.00
49.0 Exterior Balcony Railings	LS	493	If	\$	325.00	\$	160,225.00	\$ 32,045.00	\$ 192,270.00	<b>)</b> \$	15,381.60	\$207,651.60
50.0 Upgrade Emergency lighting to LED	LS	130,817	sf	\$	2.63	\$	344,048.71	\$ 68,809.74	\$ 412,858.45	5 \$	33,028.68	\$445,887.13
Other Interior - High Priority												
51.0 Evaluate elevator - approx. 20 years old	0	1	ea.	\$	200.00	\$	200.00	\$ 40.00	\$ 240.00	) \$	19.20	\$259.20
Add cell phone and wireless internet signal to back of the	0					_						*
school	0	1	ea.	\$	10,000.00		10,000.00				960.00	\$12,960.00
53.0 Upgrade to New fire alarm annunciator and panel	0	1	ea.	\$	5,000.00		5,000.00				480.00 480.00	\$6,480.00
54.0 Upgrade intercom system	U		ea.	Ş	5,000.00	<b>&gt;</b>	5,000.00	\$ 1,000.00	\$ 6,000.00	J \$	480.00	\$6,480.00
55.0 Science wing classroom door hardware - upgrade to 'always egress' but locks from the exterior	0									\$	-	
Subtotal - High Priority Needs						\$	2,891,916.36	\$ 578,383.27	\$ 3,707,273.17	7 \$	296,581.85	\$4,003,855.02
Subtotal - Madison High School Building - Critical	and High	n Priority Nee	eds			\$	9,881,589.80	\$ 1,976,317.96	\$ 12,094,881.30	\$	967,590.50	\$13,062,471.80
TOTAL MADISON HIGH SCHOOL BUILDING IMPRO	OVEMEN	TS				\$	9,881,589.80	\$ 1,976,317.96	\$ 12,094,881.30	\$	967,590.50	\$13,062,471.80

Madison Middle School – Critical & High Priority Needs







Exterior Elements - Critical  Bridges (Bus Parking to North Entry) 4 total - Backfill settling - remove sidewalks to concrete bridge slab expansion joints; remove precast caps/ralls - Felbs and reinstall; reseal wall to slab joints; water getting behind walls and leaking out at bridge steel support and effereescing notice sisting block  EEL  720 sf \$ 150.00 \$ 324,000.00 \$ 64,800.00 \$ 388,800.00 \$ 31,104.00 \$ 419,904  Kitchen loading dock and dumpster enclosure - backfill settling - remove sidewalks to expansion joints, rebackfill and re-pour sidewalks and pavement adding pad for 2nd dumpster  720 sf \$ 150.00 \$ 108,000.00 \$ 22,600.00 \$ 129,600.00 \$ 10,368.00 \$ \$139,566  Mechanical - Critical  Replace Existing Boiler  Replace Existing Boiler  N 1 ea. \$ 188,000.00 \$ 18,000.00 \$ 225,600.00 \$ 18,048.00 \$ 243,646  Replace Existing Chiller (185,000 ton) and chiller piping at unit  N 1 ea. \$ 220,000.00 \$ 220,000.00 \$ 244,000.00 \$ 264,000.00 \$ 21,120.00 \$ 285,120  North & South classrooms zoned together but have different exterior conditions and extremely difficult to 0 balance - Zone south and north sides of main corridor  M 91,500 sf \$ 10.00 \$ 889,000.00 \$ 16,880.00 \$ 1,006,800.00 \$ 80,544.00 \$ 1,006,800.00 \$ 80,544.00 \$ 1,007,844 \$ 5594,105	Campus/ Description	N	Number	Units	U	nit Cost	Const Cost	Escalation Contingency (Dec - 2021)	Const. Cost + Escalation	A/E Design	Project Cost
(LL) 42,900 + (LL) 41,000 + (Gym) 7,600 Original Building Constructed - 1992 - Building age - 28 years	MADISON MIDDLE SCHOOL										
Exterior Envelope - Critical   Replace Existing Foremore sidewalks to concrete bridge slab consisting storemore sidewalks to comparison per sidewalks and pavement adding pad (Feb. 2,160 sf s 150.00 s 188,000 s 24,000 s 129,600 s 13,710.00 s 13,	Size - 91,500 sf					42,900					
Exterior Envelope - Critical	(LL) 42,900 + (UL) 41,000 + (Gym) 7,600					41,000					
Exterior Envelope - Critical  Replace Existing Roof membrane and Ballast with new TRO atop 1/2" HD recovery board (Estimate received)  Exterior Elements - Critical  Bridges (Bus Parking to North Entry) 4 total - Backfill setting - remove sidewalks to concrete bridge slab or expansion joints, remove precast caps / rails-re-flash and reinstall; reseals wall to sala pinks; water getting behind walls and leaking out at bridge steel support and efferevesting root easking bluck  Kitchen loading dock and dumpster enclosure - backfill setting - remove sidewalks to expansion joints, remove sidewalks and particulated to expansion joints, remove sidewalks to expansion joints, remo	Original Building Constructed - 1992 - Building a	ge - 28 y	ears			7,600					
Replace Existing Roof membrane and Ballasts with new   FE   48,600 sf   5   2.94   5   142,830.00   5   28,566.00   5   171,396.00   5   13,711.68   5185,107	Population - 400-500 students					91,500					
Exterior Elements - Critical  Bridges (Bus Parking to North Entry) 4 total - Backfill settling - remove sidewalks to concrete bridge slab expansion joints; remove precast caps/fails-re-flash and will sand leaking out at bridge steel support and efferencesing onto existing block  Stitchen loading dock and dumpster enclosure - backfill seatfilling - remove sidewalks to expansion joints; water getting behind will sand leaking out at bridge steel support and efferencesing onto existing block  Stitchen loading dock and dumpster enclosure - backfill seatfilling - remove sidewalks to expansion joints; remove sidewalks to expansion joints; water getting behind will sand leaking out at bridge steel support and efference in the pour sidewalks to expansion joints; remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion joints; water getting behind will be settling - remove sidewalks to expansion join	Exterior Envelope - Critical										
Exterior Elements - Critical  Bridges (Bus Parking to North Entry) 4 total - Backfill settling - remove sidewalks to concrete bridge slab expansion joints; remove sidewalks to concrete bridge steel support and efferwescing onto existing block  EEL  720 sf \$ 150.00 \$ 324,000.00 \$ 64,800.00 \$ 388,800.00 \$ 31,104.00 \$ 5419,904 \$ 100,000 \$ 10,368.00 \$ 139,966 \$ 100,000 \$ 10,368.00 \$ 139,966 \$ 100,000 \$ 10,368.00 \$ 10,36	Replace Existing Roof membrane and Ballast with new	CC									
Bridges (Bus Parking to North Entry) 4 total - Backfill settling - remove sidewalks to concrete bridge slab or expansion joints; remove precast caps/fails-re-flash and reinstall; reseal wall to slab joints; water getting behind walls and leaking out at bridge steel support and efferevescing onto existing block (Ritchen loading dock and dumpster enclosure - backfill settling - remove sidewalks to expansion joints, rebeachfill and re-pour sidewalks and pavement adding pad for 2nd dumpster (Price of the control of	TPO atop 1/2" HD recovery board (Estimate received)	EE	48,600	sf	\$	2.94 \$	142,830.00	\$ 28,566.00	\$ 171,396.00	\$ 13,711.68	\$185,107.6
settling - remove sidewalks to concrete bridge slab or expansion joints; remove precast caps/rails-re-flash and reinstall; reseal wall to slab joints; water getting behind walls and leaking out at bridge steel support and effervescing onto existing block  It compares to the provided state of the provided st	Exterior Elements - Critical										
0 expansion joints; remove precast caps/rails-re-flash and reinstall; reseal wall to slab joints; water getting behind walls and leaking out at bridge steel support and effervescing onto existing block  Kitchen loading dock and dumpster enclosure - backfill settling - remove sidewalks to expansion joints, rebackfill and re-pour sidewalks and pavement adding pad for 2nd dumpster  **Nechanical - Critical**  **O Replace Existing Boiler**  **Nechanical - Critical**  **O Replace Existing Boiler**  **Nethanical - Critical**  **O Replace Existing Boiler**  **Nechanical - Critical**  **O Replace Existing Chiller (185,000 ton) and chiller piping at unit    **O D D D D D D D D D D D D D D D D D D											
Principal   Pri											
walls and leaking out at bridge steel support and effereescing onto existing block		EEL									
## Replace Existing Chiller (185,000 to n) and chiller piping at unit  ## 1											
Kitchen loading dock and dumpster enclosure - backfill setting - remove sidewalks to expansion joints, rebackfill and re-pour sidewalks and pavement adding pad for 2nd dumpster			2.160	c.f	<b>,</b>	4F0.00 ¢	224 000 00	ć 64.000.00	ć 200 000 00	ć 21.104.00	¢410.004.6
0 settling - remove sidewalks to expansion joints, re- backfill and re-pour sidewalks and pavement adding pad for 2nd dumpster  720 sf \$ 150.00 \$ 108,000.00 \$ 21,600.00 \$ 129,600.00 \$ 10,368.00 \$ 139,968  Mechanical - Critical  Replace Existing Boiler Replace Existing Boiler (185,000 ton) and chiller piping at unit unit  1 ea. \$ 188,000.00 \$ 220,000.00 \$ 44,000.00 \$ 264,000.00 \$ 22,120.00 \$ 285,120  HVAC Piping - Upgrade existing 2 pipe system to 4 pipe system North & South classrooms zoned together but have different exterior conditions and extremely difficult to balance - Zone south and north sides of main corridor separately instead of zoning east side and west side of wings  83,900 sf \$ 10.00 \$ 839,000.00 \$ 167,800.00 \$ 10,006,800.00 \$ 80,544.00 \$ 1,006,800.00 \$ 80,544.00 \$ 1,006,800.00 \$ 10,007,844 \$ 10,007,	-		2,100	31	Ş	150.00 \$	324,000.00	\$ 04,800.00	\$ 300,000.00	\$ 31,104.00	\$419,904.0
Deachfill and re-pour sidewalks and pavement adding pad for 2nd dumpster   720 sf   \$ 150.00 \$ 108,000.00 \$ 21,600.00 \$ 129,600.00 \$ 10,368.00 \$ \$139,968	settling - remove sidewalks to expansion joints re-										
For 2nd dumpster   For 2nd dum		EEL									
0 Replace Existing Boiler M 1 ea. \$ 188,000.00 \$ 37,600.00 \$ 225,600.00 \$ 18,048.00 \$ \$243,648   0 unit 1 ea. \$ 220,000.00 \$ 220,000.00 \$ 44,000.00 \$ 264,000.00 \$ 21,120.00 \$ 285,120   0 HVAC Piping - Upgrade existing 2 pipe system to 4 pipe system to 4 pipe system W 83,900 sf \$ 15.00 \$ 1,258,500.00 \$ 251,700.00 \$ 1,510,200.00 \$ 120,816.00 \$ 1,631,016   North & South classrooms zoned together but have different exterior conditions and extremely difficult to balance - Zone south and north sides of main corridor wings 83,900 sf \$ 10.00 \$ 839,000.00 \$ 167,800.00 \$ 1,068,000.00 \$ 80,544.00 \$ 1,087,344   Replace hydronic/water controls M 91,500 sf \$ 5.01 \$ 458,415.00 \$ 91,683.00 \$ 550,098.00 \$ 44,007.84 \$594,105			720	sf	\$	150.00 \$	108,000.00	\$ 21,600.00	\$ 129,600.00	\$ 10,368.00	\$139,968.0
0 Replace Existing Boiler M 1 ea. \$ 188,000.00 \$ 37,600.00 \$ 225,600.00 \$ 18,048.00 \$ \$243,648   0 unit 1 ea. \$ 220,000.00 \$ 220,000.00 \$ 44,000.00 \$ 264,000.00 \$ 21,120.00 \$ 285,120   0 HVAC Piping - Upgrade existing 2 pipe system to 4 pipe system to 4 pipe system W 83,900 sf \$ 15.00 \$ 1,258,500.00 \$ 251,700.00 \$ 1,510,200.00 \$ 120,816.00 \$ 1,631,016   North & South classrooms zoned together but have different exterior conditions and extremely difficult to balance - Zone south and north sides of main corridor wings 83,900 sf \$ 10.00 \$ 839,000.00 \$ 167,800.00 \$ 1,068,000.00 \$ 80,544.00 \$ 1,087,344   Replace hydronic/water controls M 91,500 sf \$ 5.01 \$ 458,415.00 \$ 91,683.00 \$ 550,098.00 \$ 44,007.84 \$594,105											
Replace Existing Chiller (185,000 ton) and chiller piping at unit  1 ea. \$ 220,000.00 \$ 220,000.00 \$ 44,000.00 \$ 264,000.00 \$ 21,120.00 \$ 285,120 \$ 1,258,500.00 \$ 1,258,500.00 \$ 1,510,200.00 \$ 1,510,200.00 \$ 1,0816.00 \$ 1,631,016 \$ 1,000.00 \$	Mechanical - Critical										
1 ea. \$ 220,000.00 \$ 44,000.00 \$ 264,000.00 \$ 21,120.00 \$ 2285,120 \$ 1,000.00 \$ 264,000.00 \$ 21,120.00 \$ 2285,120 \$ 1,000.00 \$ 251,700.00 \$ 1,510,200.00 \$ 1,510,200.00 \$ 1,510,200.00 \$ 1,510,200.00 \$ 1,510,200.00 \$ 1,510,200.00 \$ 1,000.00 \$ 1	.0 Replace Existing Boiler	М	1	ea.	\$	188,000.00 \$	188,000.00	\$ 37,600.00	\$ 225,600.00	\$ 18,048.00	\$243,648.0
HVAC Piping - Upgrade existing 2 pipe system to 4 pipe system to 4 pipe system  North & South classrooms zoned together but have different exterior conditions and extremely difficult to balance - Zone south and north sides of main corridor separately instead of zoning east side and west side of wings  83,900 sf \$ 10.00 \$ 839,000.00 \$ 167,800.00 \$ 1,006,800.00 \$ 80,544.00 \$1,087,344 Replace hydronic/water controls  M 91,500 sf \$ 5.01 \$ 458,415.00 \$ 91,683.00 \$ 550,098.00 \$ 44,007.84 \$594,105	Replace Existing Chiller (185,000 ton) and chiller piping at unit	М	1	ea.	\$	220,000.00 \$	220,000.00	\$ 44,000.00	\$ 264,000.00	\$ 21,120.00	\$285,120.0
North & South classrooms zoned together but have different exterior conditions and extremely difficult to balance - Zone south and north sides of main corridor separately instead of zoning east side and west side of wings 83,900 sf \$ 10.00 \$ 839,000.00 \$ 167,800.00 \$ 1,006,800.00 \$ 80,544.00 \$1,087,344 Replace hydronic/water controls M 91,500 sf \$ 5.01 \$ 458,415.00 \$ 91,683.00 \$ 550,098.00 \$ 44,007.84 \$594,105		M	82.000	c.f	ć	1F.00 ¢	1 359 500 00	ć 251 700 00	ć 1 F10 200 00	ć 120.816.00	¢1 621 016 (
different exterior conditions and extremely difficult to balance - Zone south and north sides of main corridor separately instead of zoning east side and west side of wings 83,900 sf \$ 10.00 \$ 839,000.00 \$ 167,800.00 \$ 1,006,800.00 \$ 80,544.00 \$1,087,344 Replace hydronic/water controls M 91,500 sf \$ 5.01 \$ 458,415.00 \$ 91,683.00 \$ 550,098.00 \$ 44,007.84 \$594,105	·		65,500	31	Ş	15.00 \$	1,238,300.00	φ 251,700.00	٦,٥١٥,٧٥٥.00	÷ 120,810.00	\$1,031,016.0
balance - Zone south and north sides of main corridor separately instead of zoning east side and west side of wings 83,900 sf \$ 10.00 \$ 839,000.00 \$ 167,800.00 \$ 1,006,800.00 \$ 80,544.00 \$1,087,344 Replace hydronic/water controls M 91,500 sf \$ 5.01 \$ 458,415.00 \$ 91,683.00 \$ 550,098.00 \$ 44,007.84 \$594,105											
separately instead of zoning east side and west side of wings       83,900 sf \$ 10.00 \$ 839,000.00 \$ 167,800.00 \$ 1,006,800.00 \$ 80,544.00 \$ 1,087,344         Replace hydronic/water controls       M       91,500 sf \$ 5.01 \$ 458,415.00 \$ 91,683.00 \$ 550,098.00 \$ 44,007.84 \$ \$594,105	.0 balance - Zone south and north sides of main corridor	M									
wings       83,900       sf       \$       10.00 \$       839,000.00 \$       167,800.00 \$       \$       1,006,800.00 \$       \$ 1,006,800.00 \$ <td></td>											
			83,900	sf	\$	10.00 \$	839,000.00	\$ 167,800.00	\$ 1,006,800.00	\$ 80,544.00	\$1,087,344.0
Subtotal - Critical Needs \$3.538.745.00 \$707.749.00 \$4.246.494.00 \$330.710.52 \$4.586.213	Replace hydronic/water controls	M	91,500	sf	\$	5.01 \$	458,415.00	\$ 91,683.00	\$ 550,098.00	\$ 44,007.84	\$594,105.8
JJ,JJ0,/7J,00  J/0/,/7J,00  34.240.434.00  J.3.33./13.32  <b>J4.300.21</b> .	Subtotal - Critical Needs						\$3,538,745.00	\$707,749.00	\$4,246,494.00	\$339,719.52	\$4,586,213.5

Madison County Schools Renovations  Critical Needs Assessment 2021-22												
	Cita High Drianity				Criti	icai Needs A	ssessment 2021-22					
8.0	Site - High Priority Site Sewer treatment - complete upgrades (indicates approx. area of sand filtration pit)	S	2,600	sf	\$	40.00 \$	104,000.00	\$ 20,800.00	\$ 124,800.00	\$ 9,984.00	\$134,784.00	
	Exterior Envelope - High Priority  Standing Seam metal roof canopy and soffit covering stairs to Cafeteria - remove standing seam skins & substructure and reconstruct - Clean existing steel superstructure and repaint - clean existing effervescence off brick - repoint brick at low and mid-columns add 10'-0" of gutter and 9' of downspout. Verify all underground roof drain piping is clear and drains to daylight  Gym - Add door sweeps to exterior doors  Replace existing exterior Aluminum Storefront Doors with new doors, closers, Insulated glazing and exit hardware	EE	<b>460</b> 6	sf ea.	\$ \$	54.00 \$ 30.00 \$	24,840.00 180.00		\$ 29,808.00 \$ 216.00		\$32,192.64 \$233.28	
10.0	(4 new exterior entry doors, remaining are original)	EE	18	ea.	\$	2,998.00 \$	53,964.00	\$ 10,792.80	\$ 64,756.80	\$ 5,180.54	\$69,937.34	
11.0	Exterior Elements - High Priority  Add entry canopies over bridges at corridors 254 and 262	CCI	1,460	sf	Ś	42.72 6	10 571 20	Ć 2.744.24	ć 22.205.44	ć 4.702.04	¢24.000.20	
	Bridge support steel - clean sand a repaint - verify structural integrity. Add drainage weeps to mortar joints above steel	EEL	1,460	sf	\$	12.72 \$ 50.00 \$	18,571.20 6,250.00		\$ 22,285.44		\$24,068.28 \$8,100.00	
13.0	Clean trench drains at base of rear retention wall	EEL	183	If	\$	2.50 \$	457.50	· · · · · · · · · · · · · · · · · · ·	\$ 549.00		\$592.92	
14.0 15.0	Pressure wash effervescence off brick below bridges Existing Bridge Canopies - add gutters and divert water	EEL			\$	2.00						
16.0	away from exterior concrete slabs.  Reseal all joints between exterior concrete/asphalt flatwork and vertical building elements	EEL	170 200	lf If	\$	35.03 \$ 2.50 \$	5,955.10				\$7,717.81 \$648.00	
16.0	address latest security recommendations (xxx total)	IEL										
	Locker rooms off gym - High Priority											
17.0	Reprogram these areas, now unused	IEL	2,100	sf	\$	195.00 \$	409,500.00	\$ 81,900.00	\$ 491,400.00	\$ 39,312.00	\$530,712.00	
18 A	Mechanical - High Priority  Evaluate hydronic/water circulating pumps	М				450.00 🙃	4.070.00	ć 275.00	ć 2.254.00	ć 400.10	62.424.00	
	Air handlers - evaluate - nearing end of service life	M	4 5	ea.	\$ \$	469.00 \$ 200.00 \$	1,876.00 1,000.00				\$2,431.30 \$1,296.00	

Madison County Schools Renovations  Critical Needs Assessment 2021-22															
	Electrical - High Priority														
20.0	Upgrade existing lighting and Emergency to LED throughout	Е	412	ea.	\$	538.00	\$	221,656.00	\$	44,331.20	\$	265,987.20	\$	21,278.98	\$287,266.18
	Finishes - High Priority														
21.0	Replace existing Acoustic Ceiling tile throughout	IF	91,500	ea.	\$	5.93	\$	542,595.00	\$	108,519.00	\$	651,114.00	\$	52,089.12	\$703,203.12
22.0	Once membrane roof is replaced, paint interior areas with water damage	IF	120	sf	Ś	2.00	\$	240.00	Ś	48.00	Ś	288.00	Ś	23.04	\$311.04
23.0	Replace existing window treatments	IF		If			Ś	_	Ś	-	Ś	-	Ś	_	\$0.00
24.0	Replace existing Casework bases and tops in Art room	IF	27	lf	\$	250.00	\$	6,750.00		1,350.00	\$	8,100.00	\$	648.00	\$8,748.00
	Life Safety Upgrades - High Priority														
	Upgrade emergency lighting - see Electrical	LS													
	Subtotal - High Priority Needs							\$1,398,334.80		\$279,666.96		\$1,678,001.76	\$	5134,240.14	\$1,812,241.90
	Subtotal - Madison Middle School Building - Criti			\$4,937,079.80	)	\$987,415.96		\$5,924,495.76	\$	473,959.66	\$6,398,455.42				
	TOTAL MADISON MIDDLE SCHOOL BUILDING IMPROVEM	TAL MADISON MIDDLE SCHOOL BUILDING IMPROVEMENTS								987,415.96	\$	5,924,495.76	\$ 4	473,959.66	\$6,398,455.42

Mars Hill Elementary School – Critical & High Priority Needs







<b>Madison County</b>	Schools Renovations
Critical Needs	Assessment 2021-22

Campus/ Description	N	umber	Units	U	nit Cost	Const Cost	Escalation Contingency (Dec - 2021)	Const. Cost + Escalation	A/E Design	Project Cost
MARS HILL ELEMENTARY SCHOOL										
Size - 87,801 sf										
Original Building Constructed - 1951 - Age - 69										
years - (remote teacher, DPI office) Original Building Constructed - 1956 - Age - 64 y	oors (Vin	dorgarton			9,300 6,941					
Addition Constructed - 1977 - Age - 43 years - (1	•				14,500					
Addition Constructed - 1992 - Age - 28 years - (3		•			57,060					
Population - +/- 500 students	ora, ren a	Jen grade,			87,801					
,										
Additional Classroom Space - Critical										
0 "51 Building"								1		
1 Upgrade exterior entry stair railings	LS	48	If	\$	325.00 \$	15,600.00	3,120.00	\$ 18,720.00	\$ 1,497.60	\$20,217
Remove and replace existing doors and exiting hardware at exterior egress doors.	51	4	ea.	\$	2,600.00 \$	10,400.00	\$ 2,080.00	\$ 12,480.00	\$ 998.40	\$13,478
Interior remodeling to prepare this building for students to move into as school population expands.	51	9,300	sf	\$	95.00 \$	883,500.00	\$ 176,700.00	\$ 1,060,200.00	\$ 84,816.00	\$1,145,016
Additional classrooms needed - currently approx. 5 classrooms per grade K-6, but enrollment may grow to needing 6 classrooms per grade. Currently 4th and 5th										
o have only 4 classrooms each - See Mars Hill Elementary 4 classroom addition - Potentially locate off rooms 150 &										
159 instead of 176 & 178, depending on where it works better for the existing student grade levels.										
Exterior Envelope - Critical										
1977 classroom building roof overbuild - replace existing gutters with new 6" box gutters to match blue exterior										
metal cladding. Replace existing 4"downspouts with 6" square downspouts and add additional down spouts to	EE									
system. 429 If of gutter and 374 If of downspout		813	If	\$	35.03 \$	28,479.39	5,695.88	\$ 34,175.27	\$ 2,734.02	\$36,909

4.0	Gutters and Downspouts 1956 classroom building - replace existing gutters with new 6" box gutters to match blue exterior metal cladding. Replace existing 4"downspouts with 6" square downspouts and add minimum (2) additional down spouts to system at classroom partition walls. Connect to existing underground piping. Snake existing underground piping and verify clear drainage to daylight. 184 If of gutter, 100 If of downspout	EE	284	If	\$	35.03 \$	sessment 2021-22 9,948.52	\$ 1,989.70	\$ 11,938.22	s 955.06	\$12,893.28
	Exterior electric receptacles at this wall are missing their WP covers. Replace receptacles with new code compliant WP receptacles and covers.	EE	1	ea.	Ś	200.00 \$	200.00	\$ 40.00	\$ 240.00	5 19.20	\$259.20
6.0	At South walls, (2nd grade wing, rooms 176 & 178).  Structural steel lintel used to support masonry should be cleaned, sanded, primed and repainted. Remove any caulk in joint b/t masonry and steel. Repoint with mortar as required. Add weeps to vertical masonry joints for drainage from behind wall above steel	EE	79	lf.	Ś	50.00 \$	3,950.00		\$ 4,740.00		\$5,119.20
	At all locations, verify existing floor mount unit ventilator or PTAC units are operating normally. Verify existing units have proper condensate drainage installed. It's possible condensate drain was not provided or is blocked, and therefore entering wall cavity and weeping up walls	EE	9	ea.	\$	150.00 \$	1,350.00				\$1,749.60
	Mechanical - Critical										
	1956 Boiler room and Coal rooms continuously flooded - snake existing floor drains and provide adequate drainage for water intrusion Completely demolish damaged portions of remaining 1"	М	4	ea.	\$	400.00 \$	1,600.00	\$ 320.00	\$ 1,920.00	153.60	\$2,073.60
9.0	plaster and lath ceiling that remains in boiler and coal rooms. Replace as required with 1 hr rated Type 'C" gypsum board ceiling, UL detail G505. Verify any joint between new gyp bd and existing plaster meets 1 hr minimum fire rating requirements.	M	1,200	sf	\$	35.00 \$	42,000.00	\$ 8,400.00	\$ 50,400.00	s 4,032.00	\$54,432.00
	Plumbing / Kitchen Equipment - Critical										
10.0	Existing dishwasher system appear to be leaking - assess and determine whether parts of or entire unit needs to be replaced. This may be source of water intrusion into basement	P/KE	1	ea.	\$	1,000.00 \$	1,000.00	\$ 200.00	\$ 1,200.00	96.00	\$1,296.00
	Subtotal - Critical Needs					\$	998,027.91	\$ 199,605.58	\$ 1,197,633.49	95,810.68	\$1,293,444.17

Madison County Schools Renovations	
Critical Needs Assessment 2021-22	

	Site - High Priority										
11.0	Busses and cars enter campus through a single driveway - Build additional bus entry and bus drop-off lane separate from car entry/student drop-off	S	1	ea.	\$	400,000.00 \$	400,000.00	\$ 80,000.00	\$ 480,000.00 \$	38.400.00	\$518,400.00
12.0	Better privacy fence between rock Building apartment building and school campus	S	360	lf	\$	175.00 \$	63,000.00			6,048.00	\$81,648.00
13.0	Water drainage from rock building parking is washing across walkway to the 51 building. Build curb to direct drainage away from MHES property or direct to existing sidewalk trench drain to existing rip/rap drainage area on school property.	S	100	lf	Ś	200.00 \$	20,000.00	\$ 4,000.00	\$ 24,000.00 \$	1,920.00	\$25,920.00
14.0	Address existing (original) stadium seating area, Currently a safety hazard and unusable outdoor space. Consider removing existing concrete seating and creating usable space, or restoring	S	10,600	sf	\$	55.00 \$	583,000.00	· · · · ·		55,968.00	\$755,568.00
15.0	Existing playset at 3rd -5th grade playground - assembled incorrectly-swings are questionable and not enough to serve approx. 200 students. Replace playset and repair / replace other equipment	S	1	ea.	\$	25,000.00 \$	25,000.00	\$ 5,000.00	\$ 30,000.00 \$	2,400.00	\$32,400.00
16.0	Existing K-2 playground has more equipment, but +/- 300 students compete for space. Playground drainage is inadequate and students are forced uphill to use blacktop area after rainy days. Explore adequate drainage for playground and additional equipment	S	1	ea.	\$	20,000.00 \$	20,000.00	\$ 4,000.00	\$ 24,000.00 \$	1,920.00	\$25,920.00
17.0	Separate existing K-2 playground space into K space, adding additional play equipment (locate at top of hill)	S	1	ea.	\$	50,000.00 \$	50,000.00	·		4,800.00	\$64,800.00
18.0	Main ball field and 3rd - 5th playground (adjacent to dugouts) floods during rains - regrade for positive drainage	S	1	ea.	\$	5,000.00 \$	5,000.00	\$ 1,000.00	\$ 6,000.00 \$	480.00	\$6,480.00

					Madis	on County School	s Renovations				
					Critic	cal Needs Assessn	nent 2021-22				
	Exterior Envelope = High Priority										
19.0	Roof overbuild over 1977 structure appears to be leaking at perimeter edges outside of room 184 & 185. Prior to reinstalling gutters, loosen and evaluate flashing and underlayment. Remove and reinstall peel and stick flashing down face of fascia blocking and 12" up roof towards ridge	EE	408	sf	\$	50.00 \$	20,400.00 \$	4,080.00	\$ 24,480.00	\$ 1,958.40	\$26,438.40
20.0	Roof overbuild over 1977 structure appears to be leaking at perimeter edges outside of room 176 & 178. Prior to reinstalling gutters, loosen and evaluate flashing and underlayment. Remove and reinstall peel and stick flashing down face of fascia blocking and 12" up roof towards ridge	EE	568	sf	Ś	50.00 <b>\$</b>	28,400.00 \$	5,680.00	\$ 34,080.00	\$ 2,726.40	\$36,806.40
21.0	At exterior North wall of "little theatre" room. roof overbuild over 1977 structure appears to be leaking at perimeter edges. Prior to reinstalling gutters, loosen and evaluate flashing and underlayment. Remove and reinstall peel and stick flashing down face of fascia blocking and 12" up roof towards ridge	EE	328	sf	\$	50.00 \$	16,400.00 \$	3,280.00			\$21,254.40
22.0	Wire glass glazing panels appear to be cracking due to heat stressors. Replace as required	EE									
23.0	At exterior North wall of "little theatre" room - evidence of water infiltration behind wall is visible. Replace adjacent gutter and add downspout to 1992 corridor roof off little theatre roof. 37 If of gutter and 24 ft of downspout	EE	61	If	<u>,</u>	25.02	2.426.02	427.37	2.554.20	205.44	ta 700 aa
24.0	Once leak is repaired, remove existing paint and repaint. Clean, sand prime and paint existing steel lintel. Remove all caulk sealant above steel lintel. Use mortar to fill gaps Add weeps into existing vertical mortar joints above steel beam plate	EE	24	lf	\$	35.03 \$ 50.00 \$	2,136.83 \$ 1,200.00 \$	240.00			\$2,769.33 \$1,555.20
25.0	At exterior North wall of "little theatre" room and patio outside of 1956 construction - once gutters are repaired, pressure wash and scrape existing paint and repaint entire North wall and soffit. Clean and repaint adjacent	EE	24	"	Ÿ	30.00 \$	1,200.00 \$	240.00	, 1,440.00	, 115.20	¥1,555.20
26.0	retaining wall below concrete cap.  At interior North wall of "little theatre" paint is peeling showing evidence of water infiltration. Repairing gutters	EE	544	sf	\$	1.28 \$	696.32 \$	139.26	\$ 835.58	\$ 66.85	\$902.43
	should alleviate - prep and repaint wall  At North wall of "little theatre" floor mount unit ventilator		203	sf	\$	1.28 \$	259.84 \$	51.97	311.81	\$ 24.94	\$336.75
27.0	appears to be abandoned. Consider removing unit from wall opening and enclose opening with adjacent CMU construction methods.	EE	22	sf	\$	70.00 \$	1,540.00 \$	308.00	\$ 1,848.00	\$ 147.84	\$1,995.84

							ools Renovations				
28.0	At Interior South facing walls, (2nd grade, rooms 176 & 178, 1st grade rooms 184 & 185 interior paint peeling. Make exterior and unit ventilator repairs to eliminate leaks. Scrape, prime and paint	EE	908	sf	\$	1.28 \$	1,162.24	\$ 232.45	\$ 1,394.69	\$ 111.58	\$1,506.26
29.0	Outside of classroom 173, existing floor mount unit ventilator louver damaged and duct exposed to outside without grille. Replace louver grille as required and cover duct opening with new screen	EE	1	ea.	\$	400.00 \$	400.00			\$ 38.40	\$518.40
30.0	Mechanical - High Priority  Unclear where existing water intrusion is happening, but flooding gets worse after hard rain events. Assess existing exterior retaining walls for leaks. Assess all drainage piping from above to discover if water is entering room from domestic drainage piping. Foundation repair	M	774	sf	S	8.76 \$	6,780.24	\$ 1,356.05	\$ 8,136.29	\$ 650.90	\$8,787.19
31.0	1956 boiler rooms - Boiler and piping abandoned. Remove abandoned items including but not limited to, existing boilers, piping storage tanks, air tanks, expansion tanks etc. out of Boiler & adjacent Coal room. Upgrade existing electrical service located in 1956 boiler/coal rooms.	M M	1248	sf	\$	40.00 \$	49,920.00				\$64,696.32
32.0	Assess all exposed plumbing piping in Boiler/coal rooms. Verify all connections are code compliant and replace any structurally compromised material	М	1,200	sf	\$	20.00 \$	24,000.00	\$ 4,800.00	\$ 28,800.00	\$ 2,304.00	\$31,104.00
33.0	1956 building - verify age of mini split units and service	M	6	ea.	\$	100.00 \$	600.00	\$ 120.00	\$ 720.00	\$ 57.60	\$777.60
34.0	Electrical - High Priority  Add switches to rooms where room light control is all inside a single room in the 2nd grade wing.	E	1	ea.	\$	7,500.00 \$	7,500.00	\$ 1,500.00	\$ 9,000.00	\$ 720.00	\$9,720.00
35.0	Plumbing / Kitchen Equipment - High Priority Kitchen dishwash area - major renovation	P/KE	93	sf	\$	195.00 \$	18,135.00	\$ 3,627.00	\$ 21,762.00	\$ 1,740.96	\$23,502.96

				Madi	son Count	y Sch	ools Renovations					
				Crit	ical Needs	Asse	essment 2021-22					
Interior Spaces - High Priority												
Kitchen ceiling consistently peeling. Above kitchen roof is an attic overbuild condition circa 1992. Verify no water/moisture is intruding into this space through walls or from roof overbuild. Scrape existing paint off ceiling, apply (2) coats recommended primer (original paint most likely oil based enamel) and repaint with (2) finish coats. Reseal existing window frames into space for moisture intrusion	ı	755	sf	Ś	3.56	\$	2,687.80	\$ 537.56	4	3,225.36	S 258.03	\$3,483.
Locker rooms off gym - reprogram these spaces, currently		755	31	,	5.50	Ų	2,007.00	337.30	٧	3,223.30	238.03	, <del>1</del> 03.
used as general storage & Maintenance equip storage	1	1,300	sf	Ś	195.00	Ś	253,500.00	\$ 50,700.00	Ś	304,200.00	24,336.00	\$328,536.
Add urinal partitions in bathroom		4	ea.	\$	1,850.00		7,400.00			8,880.00		\$9,590.4
Life Safety Upgrades - High Priority												
3.0 Stairway Railings/handrails	LS											
0.0 Steps	LS											
.0 ADA upgrade requirements	LS											
.0 Upgrade Emergency lighting	LS											
Subtotal - High Priority Needs						\$	1,609,118.27	\$ 321,823.65	\$	1,930,941.92	154,475.35	\$2,085,417.2
Subtotal - Mars Hill Elementary School Building							\$2,607,146.18	\$521,429.24		\$3,128,575.42	\$250,286.03	\$3,378,861.4
TOTAL MARS HILL ELEMENTARY SCHOOL BUILDIN	IG IMPR	OVEMENTS				\$	2,607,146.18	\$ 521,429.24	\$	3,128,575.42	250,286.03	\$3,378,861.4

## **CAMPUS ADDITION**

Mars Hill Elementary School – 4 Classroom Addition







	Campus/ Description	Number	Units	Ur	nit Cost		Const Cost	Escalation Contingency (Dec - 2021)	Const. Cost + Escalation	A/E Design	Project Cost
	MARS HILL ELEMENTARY SCHOOL 4 CLASSROOM ADD	ITION									
	4 Classroom Addition	6,900	sf								
1.0	Base Building	5,600	sf	\$	200.00	\$	1,120,000.00	\$ 168,000.00	\$ 1,288,000.00		\$1,288,000.00
2.0	Plumbing			\$	15.00	\$	84,000.00	\$ 12,600.00	\$ 96,600.00		\$96,600.00
	HVAC			\$	35.00	•	196,000.00		\$ 225,400.00		\$225,400.00
4.0	Electrical			\$	25.00	\$	140,000.00	\$ 21,000.00	\$ 161,000.00		\$161,000.00
	Subtotal - 4 Classroom Addition			\$	275.00	\$	1,540,000.00	\$ 231,000.00	\$ 1,771,000.00		\$1,771,000.00
	Restroom & Workroom Renovation										
5.0	Renovated Area	1,300	sf	\$	200.00	\$	260,000.00	\$ 39,000.00	\$ 299,000.00		\$299,000.00
	Subtotal - Restroom & Workroom Renovation			\$	200.00	\$	260,000.00	\$ 39,000.00	\$ 299,000.00		\$299,000.00
	Subtotal - PHYSICAL CONSTRUCTION										\$2,070,000.00
6.0	Testing Services, Topographical Survey,										
6.0	Building and Construction Permits			\$	10.50	\$	72,450.00		\$ 72,450.00		\$72,450.00
	Subtotal - Testing Services, Topographical Survey, Building and Construction Permits					\$	72,450.00		\$ 72,450.00		\$72,450.00
7.0	Civil, Structural, Architectural, Plumbing, Mechanical & Electrical Design Fees									\$ 175,950.00	
	Subtotal - Civil, Structural, Architectural, Plumbing, Mechanical & Electrical Design Fees								:	\$ 175,950.00	\$ 175,950.00
	TOTAL MARS HILL ELEMENTARY SCHOOL 4 CLASSROO	M ADDITION				\$	1,800,000.00	\$ 270,000.00	\$ 2,142,450.00	175,950.00	\$2,318,400.00

#### **Madison County Schools Renovations** Critical Needs Assessment 2021-22 2ND RESERVE SPACE FOR FUTURE EXPANSION GIRLS GRADE KINDERGARTEN KINDERGARTEN . . . . . . . WORK ROOM STAGE 2ND GRADE 2ND GRADE **FUTURE** MAKE ELECTRICAL CLOSET OPEN CLASSROOM FOR EXISTING PANEL AREA **FUTURE** NEW BOYS AND GIRLS CLASSROOM RESTROOMS ELECTRICAL **FUTURE** CORRIDOR CORRIDOR CLOSET CORRIDOR 3RD NEW GIRLS 3RD 3RD GRADE NEW BOYS CORRIDOR GRADE GRADE **FUTURE FUTURE** CLASSROOM CLASSROOM PRE-KINDERGARTEN NEW WORK ROOM TOILET 360 SF WORK ROOM 4TH 4-HOUR STRUCTURAL WALL

MARS HILL ELEMENTARY RESTROOMS

02/05/16

#### **MADISON COUNTY SCHOOLS**

MARSHALL, NC



GRADE

Brush Creek Elementary School – Critical & High Priority Needs













Madison County	Schools Renovations
Critical Needs	Assessment 2021-22

								Escalation			
	Campus/ Description	Numbe	ar	Units	Hr	nit Cost	Const Cost	Contingency (Dec - 2021)	Const. Cost + Escalation	A/E Design	Project Cost
	BRUSH CREEK ELEMENTARY SCHOOL	Nullibe	51 -	Offics	O1	iit Cost	Const Cost	(Dec - 2021)	LSCalation	Design	Project cost
	Size - 66,727 sf										
	Original Building Constructed - 2000 - Building ag	ge - 20 years				48,568					
	Classroom & Gym Addition - 2002 - Building Age	- 18 years				12,791					
	Classroom & Media Center Addition,										
	Renovations - 2015 - Building Age - 5 years					5,368					
	Population - 330-340 students					<u>66,727</u>					
	Exterior Envelope - High Priority										
	Main Classroom Bldg Replace all existing gutters and										
1.0	downspouts with new 6" box gutters and downspouts.	EE									
1.0	1015 If of gutter and 396 If of downspout. Add										
	downspout to all vertical walls that extend out to fascia.	1	,411	If	\$	35.03 \$	49,427.33	\$ 9,885.47	\$ 59,312.80	\$ 4,745.02	\$64,057.82
2.0	Gym- Replace all existing gutters and downspouts with new 6" box gutters and downspouts. 336 lf of gutter and										
2.0	308 If of downspout	EE	644	16		25.02	22 550 22	Å 544.0C	å 27.074.40	å 2.465.60	¢20, 226, 00
	Verify all underground roof drain piping is clear and		644	If	\$	35.03 \$	22,559.32	\$ 4,511.86	\$ 27,071.18	\$ 2,165.69	\$29,236.88
3.0	drains to daylight	EE 1	,320	If	\$	10.00 \$	13,200.00	\$ 2,640.00	\$ 15,840.00	\$ 1,267.20	\$17,107.20
	Miscellaneous roof leaks at 1992 lobby addition - remove										
4.0	Standing seam roofing, re-flash with ice and water shield	EE									
	this area and reinstall Standing seam roofing.		875	sf	\$	30.00 \$	26,250.00	\$ 5,250.00	\$ 31,500.00	\$ 2,520.00	\$34,020.00
	Roof leak below metal roof valley at west wing and computer lab roof valley connection - remove Standing										
5.0	seam roofing, re-flash this area with ice and water shield	EE									
	and reinstall Standing seam roofing.		400	sf	\$	30.00 \$	12,000.00	\$ 2,400.00	\$ 14,400.00	\$ 1,152.00	\$15,552.00
6.0	Repair exterior EIFS joint where Crack has formed in the	EE									
	vertical soffit below this connection		4	sf	\$	35.00 \$	140.00	\$ 28.00	\$ 168.00	\$ 13.44	\$181.44
	Other - High Priority										
7.0	Site Paving at back of gym access road	0 9	,200	sf	\$	6.26 \$	57,592.00	\$ 11,518.40	\$ 69,110.40	\$ 5,528.83	\$74,639.23
	Life Safety Upgrades - High Priority										
	Remove and replace existing door exiting hardware at										
8.0	exterior egress doors, include allowance for existing door	LS	40			4 000 00 6	22,400,00	ć	¢ 20,000,00	<b>.</b> 244040	Ć44 000 40
	preparation and touch up (18 total - verify in field)		18	ea.	\$	1,800.00 \$	32,400.00	\$ 6,480.00	\$ 38,880.00	\$ 3,110.40	\$41,990.40
	Subtotal - Brush Creek Elementary Building										\$276,784.97
	TOTAL BRUSH CREEK ELEMENTARY SCHOOL BUIL	DING IMPROVE	MENT	S		\$	213,568.65	\$ 42,713.73	\$ 256,282.38	\$ 20,502.59	\$276,784.97

**Hot Springs Elementary School** – Critical & High Priority Needs









									Escalation Contingency	Const. Cost +		A/E	
	Campus/ Description	Nun	nber	Units	Uni	it Cost	Const Cost		(Dec - 2021)	Escalation	D	esign	<b>Project Cost</b>
	HOT SPRINGS ELEMENTARY SCHOOL Size - <u>32,388</u> sf												
	Classroom Building Constructed - 1991 - Building a Existing Cafeteria & classroom Wing	age - 29 yea	ars			17,738							
	Constructed - 19xx - Building Age - xx years					5,865							
	Existing Gym Constructed - 19xx - Building Age - x	x years				8,785							
	Population - 138-145 students	•				32,388							
	Exterior Envelope - High Priority												
	Replace Existing Gym Roof membrane with new fully												
1.0	adhered 60 mil TPO membrane atop 1/2" HD recovery board. Includes edge metal.	EE	8,785	sf	\$	7.00	<u>.</u>	5.00	12,299.00	\$ 73,794.00	<u>د</u>	5,903.52	\$79,697.52
	Replace Existing Cafeteria/classroom Roof membrane		0,703	SI	Ş	7.00	01,45	35.00	12,299.00	\$ 73,794.00	Ş	5,905.52	\$79,097.52
2.0		EE											
	HD recovery board. Includes edge metal.		5,865	sf	\$	7.00	\$ 41,05	5.00	8,211.00	\$ 49,266.00	\$	3,941.28	\$53,207.28
	Gymnasium - Replace all existing gutters and downspouts												
3.0	with new 6" box gutters and downspouts. 462 If of gutter	EE											
	and 300 If of downspout		762	lf	\$	35.03	26,69	2.86	5,338.57	\$ 32,031.43	\$	2,562.51	\$34,593.95
	Cafeteria - Reseal or replace all existing gutters and downspouts with new 6" box gutters and downspouts.												
4.0	360 If of gutter and 144 If of downspout	EE	516	If	Ś	25.02	40.0	7F 40	2.645.40	ć 24.600.50		4 725 25	¢22.425.02
	1991 School bldg. Reseal or replace all existing gutters		210	III	Ş	35.03	5 18,07	<b>75.48</b>	3,615.10	\$ 21,690.58	Ş	1,735.25	\$23,425.82
5.0		EE											
	downspouts. 610 lf of gutter and 264 of downspouts		874	If	\$	35.03	30,61	.6.22	6,123.24	\$ 36,739.46	\$	2,939.16	\$39,678.62
6.0	1991 Classroom Building and Cafeteria wing - Verify all underground roof drain piping is clear and drains to daylight or storm drain. Check all downspout piping to underground drainage transition pipe boots for clogs and verify leak-free connections and clear drainage to	EE											
	daylight or storm drain.		550	If	\$	10.00	5,50	00.00	1,100.00	\$ 6,600.00	\$	528.00	\$7,128.00
7.0	Cafeteria wing - sand, clean, prime and paint all existing steel window lintels. Remove caulk - use mortar only at lintels, add rope weeps into mortar joints for drainage (8 ea. at 8'-0")	EE	66	16		50.00		20.00	500.00	4 4 600 00		226.42	A4 405 40
	ea. at 0 -U		68	lf	\$	50.00	3,40	00.00	680.00	\$ 4,080.00	Ş	326.40	\$4,406.40

					Madis	son County	Sch	ools Renovations					
								ssment 2021-22					
	Mechanical - High Priority												
8.0	Remove abandoned hot and chilled water piping throughout cafeteria / classroom wing.	M	5,865	sf	\$	10.00	\$	58,650.00	\$ 11,730.00	\$ 70,	380.00 \$	5,630.40	\$76,010.40
9.0	Remove abandoned pad based chiller	M	1	ea.	\$	3,000.00	\$	3,000.00	\$ 600.00	\$ 3,	600.00 \$	288.00	\$3,888.00
10.0	Remove abandoned boilers and all abandoned equipment from 1991 classroom bldg. mechanical room	M	340	sf	\$	50.00	\$	17,000.00	\$ 3,400.00	\$ 20,	400.00 \$	1,632.00	\$22,032.00
11.0	Evaluate existing fan coil and unit ventilator units in cafeteria wing - typical life span is 20 years	M	3	ea.	\$	100.00	\$	300.00	\$ 60.00	\$	360.00 \$	28.80	\$388.80
12.0	Evaluate existing fan coil units in 1991 classroom bldg typical life span is 20 years	M	2	ea.	\$	100.00	\$	200.00	\$ 40.00	\$	240.00 \$	19.20	\$259.20
13.0	Evaluate existing mini-split condensers and fans as they age - typical life span is 20 years	M	21	ea.	\$	100.00	\$	2,100.00	\$ 420.00	\$ 2,	520.00 \$	201.60	\$2,721.60
	et a contrata de la contrata del contrata del contrata de la contrata del contrata de la contrata del contrata de la contrata del contrata de la contrata del contr												
14.0	Electrical - High Priority  Gymnasium - upgrade existing electrical service panels in gym	Е	3	ea.	\$	3,846.00	\$	11,538.00	\$ 2,307.60	\$ 13,	845.60 \$	1,107.65	\$14,953.25
	Kitchen Equipment - High Priority												
15.0	Demolish existing commercial dish wash machine and	KE	1	ea.	\$	21,000.00	\$	21,000.00	\$ 4,200.00	\$ 25,	200.00 \$	2,016.00	\$27,216.00
16.0	Demolish existing commercial walk-in refrigerator and replace with new	KE	1	ea.	\$	22,500.00	\$	22,500.00	\$ 4,500.00	\$ 27,	000.00 \$	2,160.00	\$29,160.00
17.0	Demolish existing commercial walk-in Freezer and replace with new	KE	1	ea.	\$	22,500.00	\$	22,500.00	\$ 4,500.00	\$ 27,	000.00 \$	2,160.00	\$29,160.00
18.0	Replace/repair Kitchen Hood Fire suppression system	KE	1	ea.	\$	17,256.00	\$	17,256.00	\$ 3,451.20	\$ 20,	707.20 \$	1,656.58	\$22,363.78
19.0	Major kitchen renovation	KE	565	sf	\$	195.00	\$	110,175.00	\$ 22,035.00	\$ 132,	210.00 \$	10,576.80	\$142,786.80
	Other - High Priority												
20.0	Remove and Replace existing wood and metal pipe bleachers	0	160	lf	Ś	75.00	\$	12,000.00	\$ 2,400.00	\$ 14	400.00 \$	1,152.00	\$15,552.00
21.0	Renovate existing locker rooms off gym	0	508	sf	Ś	195.00		99,060.00			872.00 \$	9,509.76	\$128,381.76
22.0	Upgrade internet service to entire classroom area	0	23,620	sf	\$	0.90		21,258.00			509.60 \$	2,040.77	\$27,550.37
23.0	Site Paving	0	9,123	sf	\$	6.26		57,109.98			531.98 \$	5,482.56	\$74,014.53
	Life Safety Upgrades - High Priority		,				,	,		,	,	, , ,	, ,,
24.0	Remove and replace existing door exiting hardware at exterior egress doors, include allowance for existing door	LS											
	preparation and touch up		6	ea.	\$	1,800.00	\$	10,800.00	\$ 2,160.00	\$ 12,	960.00 \$	1,036.80	\$13,996.80
	Subtotal - Hot Springs Elementary - High Priority												\$872,572.88
	TOTAL HOT SPRINGS ELEMENTARY SCHOOL BUIL	DING	MPROVEMENTS	<u> </u>			\$	673,281.54	\$ 134,656.31	\$ 007	937.85 \$	64,635.03	\$872,572.88
	TO THE HOT ST KINGS ELEMENTARY SCHOOL BOIL	- III U III	VIII INO VEIVIEIVI	•			ې	0/3,281.54	154,050.31	,/٥٥ ڊ	J31.03 🗦	04,055.03	3012,312.88

# Thank You

