

FACILITY CONDITION ASSESSMENT

Prepared for

Ann Arbor Public Schools
2555 State Street
Ann Arbor, Michigan 48104



PREPARED BY:

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EMG PROJECT #:

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DATE OF REPORT:

February 1, 2018

ONSITE DATE:

January 15, 2018

FACILITY CONDITION ASSESSMENT

OF

MITCHELL ELEMENTARY
3550 PITTSVIEW DRIVE
ANN ARBOR, MICHIGAN 48108



engineering | environmental | capital planning | project management

Immediate Repairs Report
Mitchell Elementary
2/2/2018



EMG Renamed Item Number	ID	Cost Description	Quantity	Unit	Unit Cost	Subtotal	Deficiency Repair Estimate *
3	813721	Storefront, Metal-Framed Windows w/out Door(s), Replace	114	SF	\$48.00	\$5,472	\$5,472
5	813762	Fan Coil Unit, 800, Replace	12	EA	\$2,198.58	\$26,383	\$26,383
5	813715	Study, Fire Protection, System,	1	EA	\$6,500.00	\$6,500	\$6,500
	845457	Engineer, Structural, General, Design	1	EA	\$6,500.00	\$6,500	\$6,500
Immediate Repairs Total							\$44,855

* Location Factor (1.0) included in totals.

Replacement Reserves Report

Mitchell Elementary



2/2/2018

Location	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	Total Escalated Estimate
Mitchell Elementary	\$44,855	\$401,539	\$1,532,195	\$1,116,329	\$317,979	\$542,880	\$4,070	\$85,018	\$126,120	\$117,349	\$2,477,091	\$176,650	\$81,479	\$157,679	\$129,982	\$108,783	\$5,470	\$14,311	\$537,831	\$392,208	\$8,369,816
GrandTotal	\$44,855	\$401,539	\$1,532,195	\$1,116,329	\$317,979	\$542,880	\$4,070	\$85,018	\$126,120	\$117,349	\$2,477,091	\$176,650	\$81,479	\$157,679	\$129,982	\$108,783	\$5,470	\$14,311	\$537,831	\$392,208	\$8,369,816

EMG Renamed Item Number	ID	Cost Description	Lifespan (EUL)	EA	RUL	Quantity	Unit	Unit Cost	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	Deficiency Repair Estimate	
2	813787	Foundation, , Repair	40	38	2	400	SF	\$10.44	\$4,176			\$4,176																		\$4,176	
2	813712	Roof Structure, , Replace	50	40	10	37650	SF	\$25.52	\$960,828															\$960,828						\$960,828	
2	816259	Brick Veneer Exterior Wall, Exterior, 1-2 Stories, Repair	25	23	2	15290	SF	\$41.28	\$631,211			\$631,211																		\$631,211	
3	813765	Window, 1-2 Stories, 24 SF, Replace	30	25	5	4	EA	\$1,311.24	\$5,245						\$5,245																\$5,245
3	813763	Window, Double Glazed, 1-2 Stories, 12 SF, Replace	30	20	10	2	EA	\$584.21	\$1,168															\$1,168							\$1,168
3	813771	Window, 1-2 Stories, 24 SF, Replace	30	20	10	2	EA	\$1,311.24	\$2,622															\$2,622							\$2,622
3	813702	Window, Double Glazed, 1-2 Stories, 24 SF, Replace	30	18	12	7	EA	\$870.45	\$6,093																\$6,093						\$6,093
3	813721	Storefront, Metal-Framed Windows w/out Door(s), Replace	30	67	0	114	SF	\$48.00	\$5,472	\$5,472																					\$5,472
3	813773	Storefront, Metal-Framed Windows w/out Door(s), Replace	30	20	10	3570	SF	\$48.00	\$171,360															\$171,360							\$171,360
3	813741	Storefront, Metal-Framed Windows w/out Door(s), Replace	30	20	10	488	SF	\$48.00	\$23,424															\$23,424							\$23,424
3	813731	Storefront, Metal-Framed Windows w/out Door(s), Replace	30	20	10	1380	SF	\$48.00	\$66,240															\$66,240							\$66,240
3	813747	Exterior Door, Fully Glazed, Exterior Door, Replace	30	27	3	6	EA	\$2,106.57	\$12,639				\$12,639																		\$12,639
3	813736	Exterior Door, Exterior Door, Replace	25	20	5	6	EA	\$950.12	\$5,701						\$5,701																\$5,701
3	813700	Exterior Door, Exterior Door, Replace	25	20	5	16	EA	\$950.12	\$15,202						\$15,202																\$15,202
3	813767	Roof, Built-Up, Replace	20	18	2	37650	SF	\$12.96	\$487,997			\$487,997																			\$487,997
3	816228	Roof, Premium Grade, Replace	30	20	10	3600	SF	\$5.04	\$18,143															\$18,143							\$18,143
4	813696	Storefront, Metal-Framed Windows w/out Door(s), Replace	30	18	12	616	SF	\$48.00	\$29,568																\$29,568						\$29,568
4	813706	Interior Door, , Replace	20	18	2	19	EA	\$1,649.06	\$31,332			\$31,332																			\$31,332
4	813779	Interior Door, Interior Door, Replace	25	20	5	16	EA	\$950.12	\$15,202						\$15,202																\$15,202
4	813699	Interior Door, Solid Core, Painted/Stained, Interior Door, Replace	20	15	5	14	EA	\$1,423.11	\$19,924						\$19,924																\$19,924
4	813708	Interior Door, w/ Safety Glass, Interior Door, Replace	20	15	5	18	EA	\$1,352.72	\$24,349						\$24,349																\$24,349
4	813722	Interior Door, Fully Glazed, Interior Door, Replace	30	22	8	1	EA	\$2,106.57	\$2,107											\$2,107											\$2,107
4	813735	Interior Door, , Replace	20	12	8	24	EA	\$1,649.06	\$39,577														\$39,577								\$39,577
4	816256	Interior Door, Solid Core, Painted/Stained, Interior Door, Replace	20	1	19	8	EA	\$1,423.11	\$11,385																				\$11,385	\$11,385	
4	816209	Interior Door, Solid Core, Painted/Stained, Interior Door, Replace	20	1	19	8	EA	\$1,423.11	\$11,385																				\$11,385	\$11,385	
4	813729	Toilet Partitions, Metal, Overhead Braced, Replace	20	16	4	16	EA	\$850.00	\$13,600						\$13,600																\$13,600
4	813732	Interior Stairs/Ramp, Interior Stairs, Replace	30	18	12	72	SF	\$45.09	\$3,247																\$3,247						\$3,247
4	816224	Interior Walls, Interior Wall, Repair	8	5	3	87950	SF	\$1.45	\$127,615				\$127,615											\$127,615				\$127,615	\$382,846		
4	813772	Interior Walls, Fiberglass Reinforced, Interior Wall Panels, Replace	20	17	3	3541	SF	\$3.86	\$13,654				\$13,654																		\$13,654
4	816246	Interior Walls, Interior Wall, Repair	8	1	7	5000	SF	\$1.42	\$7,116							\$7,116										\$7,116					\$14,232
4	813718	Interior Walls, Interior Wall Finish, Replace	25	13	12	980	SF	\$16.55	\$16,223																\$16,223						\$16,223
4	813785	Floor Finishings, , Replace	10	4	6	390	SF	\$8.74	\$3,409						\$3,409													\$3,409			\$6,817
4	813697	Floor Finishings, , Repair	10	7	3	2862	SF	\$3.68	\$10,525				\$10,525													\$10,525					\$21,051
4	813760	Floor Finishings, , Replace	15	5	10	32950	SF	\$4.80	\$158,180															\$158,180							\$158,180
4	816236	Interior Floor Finish, Vinyl Tile (VCT), Replace	15	1	14	2000	SF	\$4.80	\$9,601																		\$9,601				\$9,601
4	813749	Floor Finishings, , Replace	50	35	15	957	SF	\$15.76	\$15,078																		\$15,078				\$15,078
4	813738	Floor Finishings, Standard Commercial, Medium Traffic, Replace	10	6	4	5678	SF	\$7.26	\$41,201				\$41,201														\$41,201				\$82,403
4	813701	Ceilings, Ceiling, Repair	10	6	4	900	SF	\$1.94	\$1,743					\$1,743													\$1,743				\$3,486
4	813755	Ceilings, Ceiling, Repair	10	6	4	1450	SF	\$1.94	\$2,808					\$2,808													\$2,808				\$5,616

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	845462	Play Surfaces & Sports Courts, Asphalt, Seal & Stripe	5	3	2	5300	SF	\$0.38	\$2,017			\$2,017					\$2,017					\$2,017					\$2,017			\$8,067	
	845457	Engineer, Structural, General, Design	0	0	0	1	EA	\$6,500.00	\$6,500	\$6,500																				\$6,500	
Totals, Unescalated										\$44,855	\$389,843	\$1,444,241	\$1,021,599	\$282,520	\$468,293	\$3,409	\$69,127	\$99,560	\$89,938	\$1,843,189	\$127,615	\$57,147	\$107,372	\$85,934	\$69,824	\$3,409	\$8,658	\$315,919	\$223,670	\$6,756,122	
Location Factor (1.00)										\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Totals, Escalated (3.0% inflation, compounded annually)										\$44,855	\$401,539	\$1,532,195	\$1,116,329	\$317,979	\$542,880	\$4,070	\$85,018	\$126,120	\$117,349	\$2,477,091	\$176,650	\$81,479	\$157,679	\$129,982	\$108,783	\$5,470	\$14,311	\$537,831	\$392,208	\$8,369,816	

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1. Executive Summary

1.1. Property Information and General Physical Condition

The property information is summarized in the table below. More detailed descriptions may be found in the various sections of the report and in the Appendices.

Property Information	
Address:	3550 Pittsview Drive Ann Arbor, Michigan 48108
Year Constructed/Renovated:	1951, Phase I / 2016 Phase II
Current Occupants:	Ann Arbor Public Schools
Percent Utilization:	100
Management Point of Contact:	Jim Vibbart 734.320.3613 phone
Property Type:	Classrooms
Site Area:	10 acres
Building Area:	43,435 SF
Number of Buildings:	2
Number of Stories:	1
Parking Type and Number of Spaces:	49 spaces in open lots,
Building Construction:	Masonry bearing walls, concrete slab on grade, with steel bar joist roof and metal decking..
Roof Construction:	Gabled roofs with asphalt shingles. Flat roofs with built-up membrane.
Exterior Finishes:	Brick Veneer
Heating, Ventilation & Air Conditioning:	Central system with boilers, fan coils, air handler, hydronic baseboard radiators and cabinets. Individual package units on roof and split-systems. Supplemental components: package units in building addition.
Fire and Life/Safety:	Smoke detectors, alarms, strobes, extinguishers, pull stations, alarm panel, exit signs.
ADA :	This building does not have any major ADA issues
All 43,435 square feet of the building are occupied by a single occupant, Ann Arbor Public Schools. The spaces are mostly, classrooms, and supporting restrooms, administrative offices, mechanical and other utility spaces.	
Assessment Information	
Dates of Visit:	January 15, 2018 and January 16, 2018
On-Site Point of Contact (POC):	Jim Vibbart
Assessment and Report Prepared by:	Benjamin Huseman

Property Information	
Reviewed by:	Al Diefert Technical Report Reviewer For Andrew Hupp Program Manager arhupp@emgcorp.com 800.733.0660 x 6632

1.2. Key Findings

Site : The parking lot and drive way need to be milled and overlaid with new asphalt. The playground equipment shows signs of corrosion.

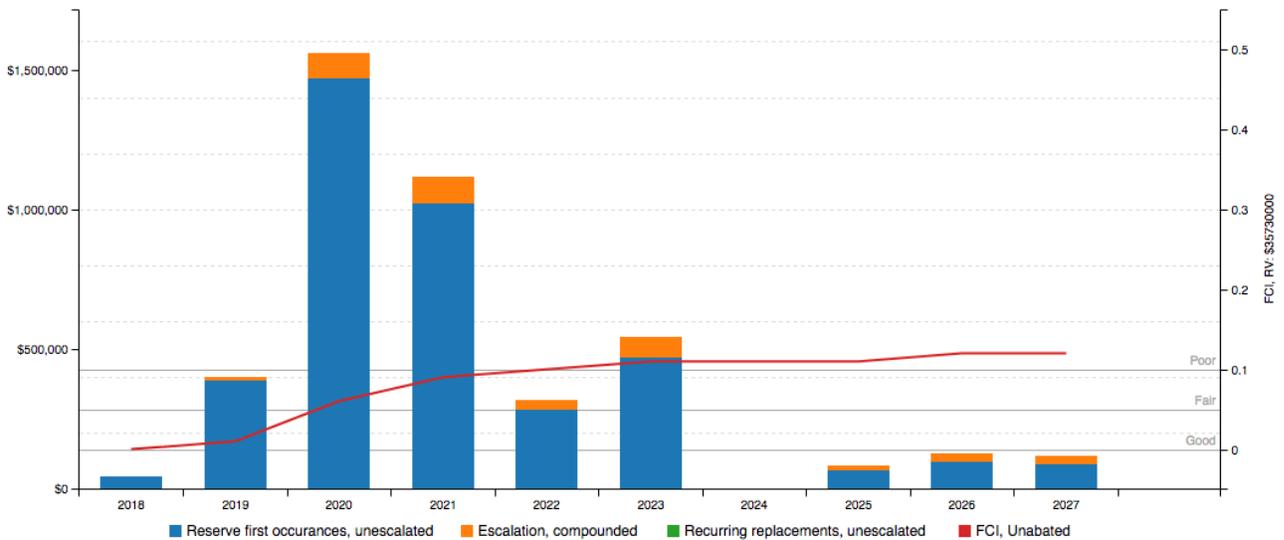
Architectural : The brick veneer is in poor condition with multiple areas of deteriorated mortar. The concrete slab on grade has cracks and cracks have formed on the CMU blocks. A professional engineer must be retained to design a fire suppression system, provide recommendations and, if necessary, estimate the scope and cost of installation. The cost of this study is included in the cost tables. A professional engineer must be retained to examine the cracks in the concrete slab on grade, and CMU blocks. A cost allowance to repair brick veneer is also included in the cost tables

MEPF : The original fan coil units that were installed in the facility have failed and should be replaced. The BAS system is a hybrid of DDC and pneumatic and should be replaced. The facility does not have a fire suppression system, and only four certified fire extinguishers in the entire facility.

1.3. Facility Condition Index (FCI)

FCI Analysis: Mitchell Elementary

Replacement Value: \$ 35,730,000; Inflation rate: 3.0%



One of the major goals of the FCA is to calculate the FCI, which gives an indication of a building's overall condition. Two FCI ratios are calculated and presented, the Current Year and Ten-Year. The Current Year FCI is the ratio of Immediate Repair Costs to the building's Current Replacement Value. Similarly, the Ten-Year FCI is the ratio of anticipated Capital Reserve Needs over the next ten years to the Current Replacement Value.



Fci Condition Rating	Definition	Percentage Value
Good	In new or well-maintained condition, with no visual evidence of wear, soiling or other deficiencies.	0 to .05
Fair	Subjected to wear and soiling but is still in a serviceable and functioning condition.	> than .05 to .10
Poor	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	> than .10 to .60
Very Poor	Has reached the end of its useful or serviceable life. Renewal is now necessary.	> than .60

The graphs above and tables below represent summary-level findings for the FCA. The deficiencies identified in this assessment can be combined with potential new construction requirements to develop an overall strategy that can serve as the basis for a portfolio-wide capital improvement funding strategy. Key findings from the assessment include:

KEY FINDING	METRIC
Current Year Facility Condition Index (FCI) FCI = (IR)/(CRV):	0.13%
Current Year FCI Rating:	2018
10-Year Facility Condition Index (FCI) FCI = (RR)/(CRV):	12.08%
10-Year FCI Rating	0.12
Current Replacement Value (CRV):	\$35,730,000
Year 0 (Current Year) - Immediate Repairs (IR):	\$44,855
Years 1-10 - Replacement Reserves (RR):	\$4,270,270
Total Capital Needs:	\$4,315,125

Further detail on the specific costs that make up the Immediate Repair Costs can be found in the cost tables at the beginning of this report.

2. Building Structure

A10 Foundations

Building Foundation		
Item	Description	Condition
Foundation	Slab on grade with integral footings	Fair
Basement and Crawl Space	None	NA

Anticipated Lifecycle Replacements

- No components of significance

Actions/Comments:

- The foundations and footings cannot be directly observed. However, there are isolated areas of cracking, movement, and vertically displaced slabs in the utility closet. Cracking of the CMU walls in the building interior indicate settling has occurred.. This condition typically indicates excessive settlement or other potential problems with the foundation system. A Professional Engineer with specific expertise in structural design and construction in this geographical area must be retained to evaluate the structure and to provide remedial recommendations consistent with local regulatory and code requirements. Although the estimated cost of repair cannot be accurately determined without the recommended study, a budgetary cost allowance to repair the affected elements is also included.

B10 Superstructure

B1010 Floor Construction & B1020 Roof Construction		
Item	Description	Condition
Framing / Load-Bearing Walls	Masonry walls	Fair
Ground Floor	Concrete slab	Fair
Upper Floor Framing	Steel beams	Fair
Upper Floor Decking	Metal decking	Fair
Balcony Framing	None	NA
Balcony Decking	None	NA
Balcony Deck Toppings	None	NA
Balcony Guardrails	None	NA
Roof Framing	Open-web steel joists	Fair
Roof Decking	Metal decking	Fair

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Caulk minor cracking	<input checked="" type="checkbox"/>	Monitor cracking for growth	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- The superstructure is exposed in some locations, which allows for limited observation. There is isolated evidence of deflection and movement illustrated by cracks in the CMU wall. A Professional Engineer with specific expertise in structural design and construction in this geographical area must be retained to evaluate the structure and to provide remedial recommendations consistent with local regulatory and code requirements.

3. Building Envelope

B20 Exterior Vertical Enclosures

B2010 Exterior Walls		
Type	Location	Condition
Primary Finish	Brick veneer	Fair
Secondary Finish	Metal siding	Good
Accented with	Metal siding	Fair
Soffits	Not Applicable	--
Building sealants	Between dissimilar materials, at joints, around windows and doors	Fair

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Graffiti	<input type="checkbox"/>	Effluorescence	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- Significant portions of the mortar joints along the brick veneer are cracked on all elevtions of the facility. The damaged mortar joints must be cleaned and re-pointed.

B2020 Exterior Windows				
Window Framing	Glazing	Location	Window Screen	Condition
Aluminum framed storefront	Double glaze	Throughout Facility	<input checked="" type="checkbox"/>	Fair
Aluminum framed, operable	Double glaze	Throughout Facility	<input checked="" type="checkbox"/>	Fair
Aluminum framed, fixed	Single glaze	Throughout Facility	<input type="checkbox"/>	Fair
Aluminum framed, operable	Double glaze	Building Addition	<input checked="" type="checkbox"/>	Good

B2050 Exterior Doors		
Main Entrance Doors	Door Type	Condition
	Fully glazed, metal framed	Fair
Secondary Entrance Doors	Metal, insulated	Fair



Service Doors	Metal, insulated	Fair
Overhead Doors	None	NA

Anticipated Lifecycle Replacements:

- Windows
- Storefront glazing
- Exterior steel doors
- Exterior glazed doors
- Window sealants

Actions/Comments:

- There are a few rusted doors and door frames. The damaged doors must be replaced.

B3010 Primary Roof			
Location	Throughout	Finish	Built-up membrane
Type / Geometry	Flat	Roof Age	18 Yrs
Flashing	Membrane	Warranties	Unknown
Parapet Copings	None	Roof Drains	Internal drains
Fascia	Metal Panel	Insulation	None
Soffits	None	Skylights	No
Attics	None	Ventilation Source-1	None
Roof Condition	Fair	Ventilation Source-2	None

B3010 Secondary Roof			
Location	Center of building	Finish	Asphalt shingles
Type / Geometry	Gable Roof	Roof Age	20 Yrs
Flashing	Sheet metal	Warranties	Unknown
Parapet Copings	None	Roof Drains	Edge drainage to ground
Fascia	Wood	Insulation	None
Soffits	None	Skylights	No
Attics	None	Ventilation Source-1	None
Roof Condition	Fair	Ventilation Source-2	None

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Drainage compents broken/missing	<input type="checkbox"/>	Vegetation/fungal growth	<input type="checkbox"/>
Blocked Drains	<input checked="" type="checkbox"/>	Debris	<input type="checkbox"/>



Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Degredation Issues			
Observation	Exists At Site	Observation	Exists At Site
Evidence of roof leaks	<input type="checkbox"/>	Significant ponding	<input type="checkbox"/>
Excessive patching or repairs	<input type="checkbox"/>	Blistering or ridging	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Anticipated Lifecycle Replacements:

- Asphalt shingles
- Built-up roof membrane

Actions/Comments:

- The roof finishes appear to be more than 15 years old. Information regarding roof warranties or bonds was not available.
- According to the POC, there are no active roof leaks. There is no evidence of active roof leaks.
- There is no evidence of roof deck or insulation deterioration. The roof substrate and insulation should be inspected during any future roof repair or replacement work.
- Roof drainage appears to be adequate. Clearing and minor repair of drain system components should be performed regularly as part of the property management’s routine maintenance and operations program.



4. Interiors

C10 Interior Construction

C1030 Interior Doors		
Item	Type	Condition
Interior Doors	Steel, Solid Core	Fair
Door Framing	Metal	Fair
Fire Doors	Yes	Fair
Closet Doors		--

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Improperly adjusted door closures	<input type="checkbox"/>	Damaged/loose door hardware	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

C2010 Wall Finishes; C2030 Floor Finishes; C2050 Ceiling Finishes: The following table generally describes the locations and typical conditions of the interior finishes within the facility:

Interior Finishes - Mitchell Elementary School

Location/Space	Finish	Quantity (SF)	Condition	Action	RUL	Est Cost	
Classrooms	Ceilings	Wood	4008	Fair	Replace	10	36,970
Gymnasium	Walls	Plastic Fiberglass-Reinforced Panels	3541	Fair	Replace	3	13,654
Gymnasium	Floor	Wood Strip	2862	Fair	Sand & Refinish	3	10,525
Modular Building	Walls	Gypsum Board/Plaster/Metal	5000	Good	Prep & Paint	7	7,116
Modular Building	Floor	Vinyl Tile (VCT)	2000	Good	Replace	14	9,601
Modular Building	Ceiling	Suspended Acoustical Tile (ACT)	2000	Good	Replace	19	6,222
Restrooms	Walls	Ceramic Tile	500	Fair	Replace	23	8,277
Restrooms	Floor	Epoxy Coating	390	Fair	Prep & Paint	6	3,409
Restrooms	Floor	Ceramic Tile	957	Fair	Replace	15	15,078
Restrooms	Ceilings	Gypsum Board/Plaster/Metal	900	Fair	Prep & Paint	4	1,743
Throughout building	Walls	Ceramic Tile	980	Fair	Replace	12	16,223
Throughout building	Walls	Concrete/Masonry	87950	Fair	Prep & Paint	3	127,615
Throughout building	Floor	Vinyl Tile (VCT)	32950	Fair	Replace	10	158,180
Throughout building	Floor	Carpet Standard-Commercial Medium-Traffic	5678	Fair	Replace	4	41,201
Throughout building	Ceilings	Gypsum Board/Plaster/Metal	1450	Fair	Prep & Paint	4	2,808
Throughout building	Ceilings	Suspended Acoustical Tile (ACT)	22450	Fair	Replace	3	69,842
Throughout building	Ceilings	Suspended Acoustical Tile (ACT)	9356	Fair	Replace	7	29,107
Throughout building	Ceilings	Suspended Acoustical Tile (ACT)	1211	Good	Replace	18	3,767

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Loose carpeting/flooring	<input type="checkbox"/>	Minor areas of stained ceiling tiles	<input type="checkbox"/>
Minor paint touch-up	<input type="checkbox"/>	Areas of damaged/missing baseboard	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Anticipated Lifecycle Replacements:

- Carpet
- Vinyl tile
- Ceramic tile
- Interior paint
- Suspended acoustic ceiling tile
- Interior doors

Actions/Comments:

- It appears that the interior finishes are original , except for new ceiling tiles in the lobby area, and where the building addition was completed. The remaining interior finishes are old, worn, and outdated. The interior is dark and the ceilings feel low. Complete interior renovations that include comprehensive updating of the interior finishes are recommended.

5. Services (MEPF)

See the Mechanical Equipment List in the Appendices for the quantity, manufacturer's name, model number, capacity and year of manufacturer of the major mechanical equipment, if available.

D10 Conveying Systems

Not applicable. There are no elevators or conveying systems.

D20 Plumbing

D2010 Domestic Water Distribution		
Type	Description	Condition
Water Supply Piping	Copper	Fair
Water Meter Location	Building Exterior	

Domestic Water Heaters or Boilers	
Components	Water Heaters
Fuel	Natural gas
Boiler or Water Heater Condition	Fair
Supplementary Storage Tanks?	No
Adequacy of Hot Water	Adequate
Adequacy of Water Pressure	Adequate

D2020 Sanitary Drainage		
Type	Description	Condition
Waste/Sewer Piping	Cast iron	Fair
Vent Piping	Cast iron	Fair

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Hot water temperature too hot or cold	<input type="checkbox"/>	Minor or isolated leaks	<input type="checkbox"/>
Scale build up on piping exterior	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>

Plumbing Systems - Mitchell Elementary School

Location	Component	Component Description	Quantity	Condition	Action	RUL	Est Cost
Restrooms	Urinal	Vitreous China	5	Fair	Replace	2	5,967.20
Building Addition	Drinking Fountain	Refrigerated	1	Good	Replace	8	1,257.51
Janitor Closet	Service Sink	Floor	2	Fair	Replace	7	3,199.02
Janitor Closet	Water Heater	Electric, Residential	1	Fair	Replace	10	1,249.92
Kitchen	Sink	Pot, Multi-compartment	1	Fair	Replace	15	1,262.50
Kitchen	Emergency Eye Wash	Emergency Eye Wash	1	Fair	Replace	4	1,417.04
Mechanical room	Sink	Plastic	1	Fair	Replace	8	575.99
Mechanical room	Gas Distribution System	Compressed Air Dryer	1	Fair	Replace	3	5,077.01
Mechanical room	Gas Distribution System	Air Compressor, 2 HP	1	Fair	Replace	3	6,611.73
Mechanical room	Gas Distribution System	Air Compressor, 2 HP	1	Fair	Replace	3	6,611.73
Mezzanine	Water Heater	Gas, Commercial, 60 to 120 GAL	1	Fair	Replace	9	10,698.82
Throughout building	Drinking Fountain	Vitreous China	2	Fair	Replace	5	3,877.99
Throughout building	Drinking Fountain	Refrigerated	5	Fair	Replace	5	6,287.54
Utility closet	Water Heater	Gas, Commercial, 60 to 120 GAL	1	Fair	Replace	3	10,698.82
Utility closet	Water Pumps	Domestic Circulator or Booster Pump, 0.5 HP	1	Fair	Replace	8	3,414.40

Anticipated Lifecycle Replacements:

- Circulation pumps
- Water heaters
- Toilets
- Urinals
- Sinks
- Vanities

Actions/Comments:

- The plumbing systems appear to be well maintained and functioning adequately. The water pressure appears to be sufficient. No significant repair actions or short term replacement costs are required. Routine and periodic maintenance is recommended. Future lifecycle replacements of the components or systems listed above will be required.

D30 Building Heating, Ventilating, and Air Conditioning (HVAC)

Building Central Heating System	
Primary Heating System Type	Hot water boilers
Heating Fuel	Natural gas
Location of Major Equipment	Mechanical rooms
Space Served by System	Original building area, not including addition

Building Central Cooling System	
Primary Cooling System Type	None
Refrigerant	None
Cooling Towers	None
Location of Major Equipment	None
Space Served by System	NA

Distribution System	
HVAC Water Distribution System	Two-pipe



Distribution System	
Air Distribution System	Constant
Location of Air Handlers	Mezzanine
Terminal Units	Fan coil units (hydronic)
Quantity and Capacity of Terminal Units	approximately 30 fan coil units / unit ventilators ranging from 400 to 1200 CFM
Location of Terminal Units	Adjacent to windows

Packaged, Split & Individual Units	
Primary Components	Package units
Cooling (if separate from above)	performed via components above
Heating Fuel	Natural gas
Location of Equipment	Rooftop
Space Served by System	Entire building

Supplemental/Secondary Components	
Supplemental Component #1	Through-wall air conditioners
Location / Space Served by Through-wall air conditioners	Newer wing classrooms
Through-wall air conditioners Condition	Good
Supplemental Component #2	Split system heat pumps
Location / Space Served by Split system heat pumps	Office
Split system heat pumps Condition	Fair
Supplemental Component #3	Through-wall air conditioners
Location / Space Served by Through-wall air conditioners	Modular building
Through-wall air conditioners Condition	Good

Controls and Ventilation	
HVAC Control System	BAS, hybrid pneumatic/electronic system
HVAC Control System Condition	Poor
Controls and Ventilation	
Building Ventilation	Roof top exhaust fans
Ventilation System Condition	Fair

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Ductwork/grills need cleaned	<input type="checkbox"/>	Minor control adjustments needed	<input type="checkbox"/>
Leaking condensate lines	<input type="checkbox"/>	Poor mechanical area access	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Degredation Issues			
Observation	Exists At Site	Observation	Exists At Site
Heating, Cooling or Ventilation is not adequate	<input type="checkbox"/>	Major system inefficiencies	<input type="checkbox"/>
HVAC controls pneumatic or antiquated	<input checked="" type="checkbox"/>	Obsolete refrigerants : R11, R12, R22, R123, R502	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Mechanical Systems - Mitchell Elementary School

Location	Component	Component_Description	Quantity	Unit	Condition	Action	RUL	Est Cost
Building Addition	Fan Coil Unit	Hydronic, 401 to 800 CFM	1	EA	Good	Replace	13	2,198.58
Building Addition	Package Unit	RTU, 4 Ton	1	EA	Good	Replace	13	10,581.39
Building Addition	Package Unit	RTU, 4 Ton	1	EA	Good	Replace	13	10,581.39
Building Addition	Package Unit	RTU, 4 Ton	1	EA	Good	Replace	13	10,581.39
Building Addition	Package Unit	RTU, 4 Ton	1	EA	Good	Replace	13	10,581.39
Building Addition	Package Unit	RTU, 4 Ton	1	EA	Good	Replace	13	10,581.39
Classrooms	Fan Coil Unit	Hydronic, 1,201 to 1,800 CFM	10	EA	Fair	Replace	5	49,860.13
Mechanical room	Boiler	Gas, 2,501 to 4,200 MBH	1	EA	Good	Replace	18	120,905.15
Mechanical room	Boiler	Gas, 2,501 to 4,200 MBH	1	EA	Good	Replace	18	120,905.15
Mechanical room	Boiler Room Piping System	Chemical Feed System	1	EA	Fair	Replace	14	10,642.24
Mechanical room	Circulation Pump	Distribution Pump, Heating Water, 5 HP	1	EA	Fair	Replace	9	5,518.88
Mechanical room	Circulation Pump	Distribution Pump, Heating Water, 3 HP	1	EA	Fair	Replace	13	4,652.29
Mechanical room	Circulation Pump	Distribution Pump, Heating Water, 3 HP	1	EA	Fair	Replace	13	4,652.29
Mechanical room	Circulation Pump	Distribution Pump, Heating Water, 5 HP	1	EA	Fair	Replace	9	5,518.88
Mechanical room	Unit Heater	Hydronic, 161 to 250 MBH	1	EA	Fair	Replace	9	4,239.16
Mechanical room	Unit Heater	Hydronic, 101 to 160 MBH	1	EA	Fair	Replace	5	2,469.66
Mezzanine	Air Handler	Interior, 10,001 to 15,000 CFM	1	EA	Fair	Replace	2	62,968.76
Mezzanine	Exhaust Fan	Centrifugal, 251 to 800 CFM	1	EA	Fair	Replace	2	2,021.87
Modular Building	PTAC	Packaged Terminal Air Conditioner (PTAC), 15,001 to 24,000 BTU/H	1	EA	Good	Replace	9	3,835.99
Modular Building	PTAC	Packaged Terminal Air Conditioner (PTAC), 15,001 to 24,000 BTU/H	1	EA	Good	Replace	9	3,835.99
Modular Building	PTAC	Packaged Terminal Air Conditioner (PTAC), 15,001 to 24,000 BTU/H	1	EA	Good	Replace	9	3,835.99
Modular Building	PTAC	Packaged Terminal Air Conditioner (PTAC), 15,001 to 24,000 BTU/H	1	EA	Good	Replace	9	3,835.99
Modular Building	PTAC	Packaged Terminal Air Conditioner (PTAC), 15,001 to 24,000 BTU/H	1	EA	Good	Replace	9	3,835.99
Roof	Split System	Condensing Unit/Heat Pump, 4 Ton	1	EA	Fair	Replace	2	6,929.73
Roof	Split System	Condensing Unit/Heat Pump, Split System, 3 Ton	1	EA	Fair	Replace	5	5,368.00
Roof	Exhaust Fan	Roof Mounted, 401 to 500 CFM	1	EA	Fair	Replace	3	1,557.32
Roof	Exhaust Fan	Roof Mounted, 401 to 500 CFM	1	EA	Fair	Replace	3	1,557.32
Roof	Exhaust Fan	Roof Mounted, 401 to 500 CFM	1	EA	Fair	Replace	3	1,557.32
Roof	Exhaust Fan	Roof Mounted, 401 to 500 CFM	1	EA	Fair	Replace	3	1,557.32
Roof	Exhaust Fan	Roof Mounted, 401 to 500 CFM	1	EA	Fair	Replace	5	1,557.32
Roof	Exhaust Fan	Roof Mounted, 401 to 500 CFM	1	EA	Fair	Replace	7	1,557.32
Roof	Exhaust Fan	Roof Mounted, 401 to 500 CFM	1	EA	Fair	Replace	3	1,557.32
Roof	Exhaust Fan	Roof Mounted, 401 to 500 CFM	1	EA	Good	Replace	13	1,557.32
Roof	Exhaust Fan	Roof Mounted, 401 to 500 CFM	1	EA	Fair	Replace	3	1,557.32
Roof	Unit Heater	Natural Gas, 76 to 125 MBH	1	EA	Fair	Replace	10	5,006.98
Roof	Package Unit	RTU, 8 to 10 Ton	1	EA	Fair	Replace	4	18,554.44
Roof	Package Unit	RTU, 16 to 20 Ton	1	EA	Fair	Replace	3	36,777.37
Roof	Package Unit	RTU, 6 to 7.5 Ton	1	EA	Fair	Replace	4	14,395.83
Throughout building	Fan Coil Unit	Hydronic, 401 to 800 CFM	8	EA	Fair	Replace	5	17,588.63
Throughout building	HVAC System Ductwork	Sheet Metal	11258	SF	Fair	Replace	10	168,870.00
Throughout building	HVAC System Hydronic Piping	2-Pipe	43435	SF	Fair	Replace	5	282,327.50
Throughout building	Radiator	Hydronic Baseboard	284	LF	Fair	Replace	3	37,706.68
Throughout building	HVAC Automation/Safety	Building Automation System (HVAC Controls)	43435	SF	Fair	Upgrade	2	232,920.19

Anticipated Lifecycle Replacements:

- Boilers
- Air handling units
- Distribution pumps and motors
- Fan coil units
- Package units
- Split system heat pumps
- Baseboard heaters
- Through-wall air conditioners
- Rooftop exhaust fans

Actions/Comments:

- The HVAC systems are maintained by an outside contractor.
- The HVAC equipment appears to vary in. HVAC equipment is replaced on an "as needed" basis.
- The HVAC equipment appears to be functioning adequately overall. The maintenance staff, service contractors and principal were interviewed about the historical and recent performance of the equipment and systems.
- The air handlers are original to the 1951 construction and appear to be functioning adequately..

- The facility HVAC is controlled by a hybrid BAS system along with an outdated pneumatic system supplied by an air compressor. The two systems fail to keep the building at desired temperatures. For modernization, reliability, and increased control, full conversion to a web-based direct digital control (DDC) platform is highly recommended.

D40 Fire Protection

Item	Description					
Type	None					
Sprinkler System	None	<input checked="" type="checkbox"/>	Standpipes	<input type="checkbox"/>	Backflow Preventer	<input type="checkbox"/>
	Hose Cabinets	<input type="checkbox"/>	Fire Pumps	<input type="checkbox"/>	Siamese Connections	<input type="checkbox"/>
Sprinkler System Condition	NA					
Fire Extinguishers	Last Service Date		Servicing Current?			
	July, 2017		Yes			
Hydrant Location	On Pittsview Street					
Siamese Location	NA					
Special Systems	Kitchen Suppression System	<input type="checkbox"/>	Computer Room Suppression System	<input type="checkbox"/>		

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Extinguisher tag expired	<input type="checkbox"/>	Riser tag expired (5 year)	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- The building is not protected by fire suppression. Due to its construction date, the facility is most likely “grandfathered” by code and the installation of fire sprinklers not required until major renovations are performed. Regardless of when or if installation of facility-wide fire suppression is required by the governing municipality, EMG recommends a retrofit be performed. A budgetary cost is included.
- Fire extinguishers appear to be missing at many locations. New fire extinguishers must be installed at all required locations immediately.

D50 Electrical

Distribution & Lighting			
Electrical Lines	Overhead	Transformer	Pad-mounted
Main Service Size	800 Amps	Volts	120/240 Volt, single-phase



Distribution & Lighting			
Meter & Panel Location	Mechanical Room	Branch Wiring	Copper
Conduit	Metallic	Step-Down Transformers?	No
Security / Surveillance System?	Yes	Building Intercom System?	Yes
Lighting Fixtures	T-8		
Main Distribution Condition	Fair		
Secondary Panel and Transformer Condition	Fair		
Lighting Condition	Fair		

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Improperly stored material	<input type="checkbox"/>	Unsecured high voltage area	<input type="checkbox"/>
Loose cables or improper use of conduit	<input type="checkbox"/>	Poor electrical room ventilation	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Anticipated Lifecycle Replacements:

- Circuit breaker panels
- Main switchgear
- Interior light fixtures

Actions/Comments:

- The onsite electrical systems up to the meters are owned and maintained by the respective utility company.
- The electrical service and capacity appear to be adequate for the property's demands.

D60 Communications

D6060 Public Address Systems						
Item	Description					
Communication Equipment	Public Address System	<input checked="" type="checkbox"/>	Nurse Call System	<input type="checkbox"/>	Clock	<input type="checkbox"/>



D70 Electronic Safety and Security

D7010 Access Control and Intrusion Detection / D7050 Detection and Alarm						
Item	Description					
Access Control and Intrusion Detection	Exterior Camera	<input checked="" type="checkbox"/>	Interior Camera	<input checked="" type="checkbox"/>	Front Door Camera Only	<input type="checkbox"/>
	Cameras monitored	<input type="checkbox"/>	Security Personnel On-Site	<input type="checkbox"/>	Intercom/Door Buzzer	<input checked="" type="checkbox"/>
Fire Alarm System	Central Alarm Panel	<input checked="" type="checkbox"/>	Battery-Operated Smoke Detectors	<input type="checkbox"/>	Alarm Horns	<input checked="" type="checkbox"/>
	Annunciator Panels	<input checked="" type="checkbox"/>	Hard-Wired Smoke Detectors	<input checked="" type="checkbox"/>	Strobe Light Alarms	<input checked="" type="checkbox"/>
	Pull Stations	<input checked="" type="checkbox"/>	Emergency Battery-Pack Lighting	<input type="checkbox"/>	Illuminated EXIT Signs	<input checked="" type="checkbox"/>
Fire Alarm System Condition	Good					
Central Alarm Panel System	Location of Alarm Panel			Installation Date of Alarm Panel		
	Main Office			2016		

Anticipated Lifecycle Replacements:

- Central alarm panel
- Alarm devices and system

Actions/Comments:

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.



6. Equipment & Furnishings

E10 Equipment

The cafeteria area has a variety of commercial kitchen appliances, fixtures, and equipment. The equipment is owned and maintained in-house. The cafeteria is not used for cooking. Food is brought in from a central kitchen and served to students. Equipment is limited to food warmers, and reach-in refrigerators.

Anticipated Lifecycle Replacements:

- Reach-in refrigerators
- Food warmers

Actions/Comments:

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the reach-in refrigerators and food warmers will be required.

7. Sitework

G20 Site Improvements

G2020 Parking Lots and G2030 Pedestrian Walkways		
Item	Material	Condition
Entrance Driveway Apron	Asphalt	Fair
Parking Lot	Asphalt	Fair
Drive Aisles	Asphalt	Fair
Service Aisles	Asphalt	Fair
Sidewalks	Concrete	Fair
Curbs	Concrete	Fair
Pedestrian Ramps	Metal	Good
Ground Floor Patio or Terrace	None	NA

Parking Count				
Open Lot	Carport	Private Garage	Subterranean Garage	Freestanding Parking Structure
49	0	0	0	0
Total Number of ADA Compliant Spaces			2	
Number of ADA Compliant Spaces for Vans			2	
Total Parking Spaces			49	

Site Stairs			
Location	Material	Handrails	Condition
Modular building entrance	Metal	Metal	Good

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Pavement oil stains	<input type="checkbox"/>	Vegetation growth in joints	<input type="checkbox"/>
Stair/ramp rails loose	<input type="checkbox"/>	Stair/ramp rail needs scraped and painted	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Degredation Issues			
Observation	Exists At Site	Observation	Exists At Site
Potholes/depressions	<input type="checkbox"/>	Alligator cracking	<input checked="" type="checkbox"/>
Concrete spalling	<input type="checkbox"/>	Trip hazards (settlement/heaving)	<input type="checkbox"/>
Other	<input type="checkbox"/>	Transverse cracks	<input type="checkbox"/>

Anticipated Lifecycle Replacements:

- Asphalt seal coating
- Asphalt pavement
- Site stairs
- Pedestrian ramps

Actions/Comments:

- The asphalt pavement exhibits significant areas of failure and deterioration, such as alligator cracking, transverse cracking, extensive raveling, heavy overall surface wear, and localized depressions throughout the parking lot and service driveway. All of the paving must be overlaid with new asphalt paving in order to maintain the integrity of the overall pavement system. Milling is recommended as part of the overall repair work.

G2060 Site Development	
Property Signage	
Property Signage	Monument
Street Address Displayed?	Yes

Site Fencing		
Type	Location	Condition
Chain link with metal posts	East side of property	Good

Refuse Disposal				
Refuse Disposal	Common area dumpsters			
Dumpster Locations	Mounting	Enclosure	Contracted?	Condition
South side	Asphalt paving	None	Yes	Fair

Other Site Amenities			
	Description	Location	Condition
Playground Equipment	Plastic and metal	Exterior Playgrounds	Fair
Tennis Courts	None	NA	NA
Basketball Court	Asphalt	Exterior	Fair

Other Site Amenities			
	Description	Location	Condition
Swimming Pool	None	NA	NA

Anticipated Lifecycle Replacements:

- Signage
- Playground equipment
- Playground surfaces

Actions/Comments:

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

G2080 Landscaping		
Drainage System and Erosion Control		
System	Exists At Site	Condition
Surface Flow	<input checked="" type="checkbox"/>	Fair
Inlets	<input type="checkbox"/>	--
Swales	<input type="checkbox"/>	--
Detention pond	<input checked="" type="checkbox"/>	Good
Lagoons	<input type="checkbox"/>	--
Ponds	<input type="checkbox"/>	--
Underground Piping	<input type="checkbox"/>	--
Pits	<input type="checkbox"/>	--
Municipal System	<input type="checkbox"/>	--
Dry Well	<input type="checkbox"/>	--

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- There is no evidence of storm water runoff from adjacent properties. The storm water system appears to provide adequate runoff capacity. There is no evidence of major ponding or erosion.

Item	Description						
Site Topography	Slopes gently down from the east side of the property to the west property line.						
Landscaping	Trees	Grass	Flower Beds	Planters	Drought Tolerant Plants	Decorative Stone	None
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Landscaping Condition	Fair						



Item	Description			
	Automatic Underground	Drip	Hand Watering	None
Irrigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Irrigation Condition	NA			

Retaining Walls		
Type	Location	Condition
None	--	--

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- The topography and adjacent uses do not appear to present conditions detrimental to the property. There are no significant areas of erosion.

G30 Liquid & Gas Site Utilities

G3060 Site Fuel Distribution	
Item	Description
Natural Gas	Gas service is supplied from the gas main on the adjacent public street. The gas meter and regulator are located along the exterior walls of the building. The gas distribution piping within the building is malleable steel (black iron).

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- The pressure and quantity of gas appear to be adequate.
- The gas meter and regulator appear to be functioning adequately and will require routine maintenance.
- Only limited observation of the gas distribution piping can be made due to hidden conditions.

G40 Electrical Site Improvements

G4050 Site Lighting					
Site Lighting	None	Pole Mounted	Bollard Lights	Ground Mounted	Parking Lot Pole Type
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good					

G4050 Site Lighting			
Building Lighting	None	Wall Mounted	Recessed Soffit
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Good		

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Isolated bulb/lamp replacement	<input type="checkbox"/>	Discolored/dirty lens cover	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

Anticipated Lifecycle Replacements:

- Exterior lighting

Actions/Comments:

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

8. Ancillary Structures

Modular Trailer			
Item	Material	Item	Material
Exterior Siding	Fiber Cement	Roof Finishes	Metal,
Interior Finishes	Floor : VCT, Ceiling : Suspended ACT, Walls : Gypsum/Plaster	MEPF	See Tables in Section 5
Overall Trailer Condition			Good

Anticipated Lifecycle Replacements:

- Thru-wall Air Conditioning Units
- Vinyl Cut Tile
- Interior Wall Finish
- Suspended Accousitcal Tile
- Interior Doors

Actions/Comments:

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

9. Opinions of Probable Costs

Cost estimates are attached at the front of this report (following the cover page).

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means* and *Marshall & Swift*, EMG's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, and whether competitive pricing is solicited, etc. ASTM E2018-08 recognizes that certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

9.1 Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, EMG opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its effective age. Projections of Remaining Useful Life (RUL) are based on continued use of the Property similar to the reported past use. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be derived from an actual take-off, lump sum costs or allowances are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

9.2 Immediate Repairs

Immediate repairs are opinions of probable costs that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) material building or fire code violations, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

9.3 Replacement Reserves

Replacement Reserves are for recurring probable expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, EMG's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

EMG's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined in the Immediate Repair Cost Estimate

10. Purpose and Scope

10.1. Purpose

EMG was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record at municipal offices, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

CONDITIONS:

The physical condition of building systems and related components are typically defined as being in one of five conditions: Excellent, Good, Fair, Poor, Failed or a combination thereof. For the purposes of this report, the following definitions are used:

Excellent	=	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	=	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	=	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	=	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	=	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	=	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.

FORMAT OF THE BODY OF THE REPORT:

Throughout sections 5 through 9 of this report, each report section will typically contain three subsections organized in the following sequence:

- A descriptive table (and/or narrative), which identifies the components assessed, their condition, and other key data points.
- A simple bulleted list of Anticipated Lifecycle Replacements, which lists components and assets typically in Excellent, Good, or Fair condition at the time of the assessment but that will require replacement or some other attention once aged past their estimated useful life. These listed components are typically included in the associated inventory database with costs identified and budgeted beyond the first several years.
- A bulleted cluster of Actions/Comments, which include more detailed narratives describing deficiencies, recommended repairs, and short term replacements. The assets and components associated with these bullets are/were typically problematic and in Poor or Failed condition at the time of the assessment, with corresponding costs included within the first few years.

PLAN TYPES:

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the “why” part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the “best” fit, typically the one with the greatest significance. The following Plan Types are listed in general weighted order of importance:

Safety	=	An observed or reported unsafe condition that if left unaddressed could result in an injury; a system or component that presents a potential liability risk.
Performance/Integrity	=	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses a risk to overall system stability.
Accessibility	=	Does not meet ADA, UFAS, and/or other handicap accessibility requirements.
Environmental	=	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Modernization/Adaptation	=	Conditions, systems, or spaces that need to be upgraded in appearance or function to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	=	Any component or system in which future repair or replacement is anticipated beyond the next several years and/or is of minimal substantial early-term consequence.

10.2. Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a general statement of the subject Property’s compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey, but will help identify exposure to issues and the need for further review.
- Perform a limited assessment of accessible areas of the building(s) for the presence of fungal growth, conditions conducive to fungal growth, and/or evidence of moisture. EMG will also interview Project personnel regarding the presence of any known or suspected fungal growth, elevated relative humidity, water intrusion, or mildew-like odors. Potentially affected areas will be photographed. Sampling will not be considered in routine assessments.
- List the current utility service providers.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, in order to gain a clear understanding of the property’s overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report.
- Prepare a mechanical inventory list.

11. Accessibility and Property Research

11.1. ADA Accessibility

Generally, Title III of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of “areas of public accommodations” and “commercial facilities” on the basis of disability. Regardless of its age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

Buildings completed and occupied after January 26, 1992 are required to comply fully with the ADAAG. Existing facilities constructed prior to this date are held to the lesser standard of compliance to the extent allowed by structural feasibility and the financial resources available. As an alternative, a reasonable accommodation pertaining to the deficiency must be made.

During the FCA, a limited visual observation for ADA accessibility compliance was conducted. The scope of the visual observation was limited to those areas set forth in *EMG’s Abbreviated Accessibility Checklist* provided in Appendix D of this report. It is understood by the Client that the limited observations described herein does not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of EMG’s undertaking. Only a representative sample of areas was observed and, other than as shown on the Abbreviated Accessibility Checklist, actual measurements were not taken to verify compliance.

The facility generally appears to be accessible as stated within the defined priorities of Title III of the Americans with Disabilities Act.

Accessibility Issues			
Component	Major Issue	Moderate Issue	Minor Issue
Parking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exterior Accessible Route	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interior Accessible Route	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restrooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elevators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A full ADA Compliance Survey may reveal aspects of the property that are not in compliance.

11.2. Flood Zone and Seismic Zone

According to the Flood Insurance Rate Map, published by the Federal Emergency Management Agency (FEMA) and dated 2012, the property is located in Zone X, defined as an area outside the 500-year flood plain with less than 0.2% annual probability of flooding. Annual Probability of Flooding of Less than one percent.

According to the 1997 Uniform Building Code Seismic Zone Map of the United States, the property is located in Seismic Zone0, defined as an area of very low probability of damaging ground motion.

12. Certification

Ann Arbor Public Schools retained EMG to perform this Facility Condition Assessment in connection with its continued operation of Mitchell Elementary School, 3550 Pittsview Drive, Ann Arbor, Michigan, the "Property". It is our understanding that the primary interest of Ann Arbor Public Schools is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in depth studies were performed unless specifically required under Section 2 of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas were observed (See Section 4.2 for areas observed). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of Ann Arbor Public Schools for the purpose stated within Section 10.1 of this report. The report, or any excerpt thereof, shall not be used by any party other than Ann Arbor Public Schools or for any other purpose than that specifically stated in our agreement or within Section 10.1 of this report without the express written consent of EMG.

Any reuse or distribution of this report without such consent shall be at Ann Arbor Public Schools and the recipient's sole risk, without liability to EMG.

Prepared by: Benjamin Huseman,
Project Manager

Reviewed by:



Al Diefert
Technical Report Reviewer
For
Andrew Hupp
Program Manager

13. Appendices

- Appendix A: Photographic Record
- Appendix B: Site Plan
- Appendix C: Supporting Documentation
- Appendix D: Pre-Survey Questionnaire

Appendix A: Photographic Record



#1:	MAIN ENTRANCE
-----	---------------



#2:	FRONT ELEVATION
-----	-----------------



#3:	RIGHT ELEVATION
-----	-----------------



#4:	REAR ELEVATION
-----	----------------



#5:	LEFT ELEVATION
-----	----------------



#6:	EXTERIOR WALL, ALUMINUM SIDING
-----	--------------------------------



#7:	CRACKED CONCRETE SLAB-ON-GRADE
-----	--------------------------------



#8:	GYMNASIUM, WOOD FLOOR
-----	-----------------------



#9:	STOREFRONT WINDOWS
-----	--------------------



#10:	FAN COIL UNIT
------	---------------



#11:	WATER HEATER
------	--------------



#12:	SUSPENDED ACOUSTICAL TILE
------	---------------------------



#13:	PACKAGED UNIT (RTU),
------	----------------------



#14:	BRICK VENEER CRACKING
------	-----------------------



#15:	BRICK VENEER
------	--------------



#16:	AUDITORIUM
------	------------



#17:	BREAKROOM
------	-----------



#18:	NON-CERTIFIED FIRE EXTINGUISHER
------	------------------------------------



#19:	RESTROOM
------	----------



#20:	SIDEWALK
------	----------



#21:	PARKING LOT
------	-------------



#22:	LANDSCAPING
------	-------------



#23:	PLAY SURFACE, ASPHALT
------	-----------------------



#24:	PLAY STRUCTURE
------	----------------



#25:	SIGNAGE
------	---------



#26:	BRICK VENEER
------	--------------



#27:	STRUCTURAL WALLS, CMU
------	-----------------------



#28:	ROOF, BUILT-UP MEMBRANE
------	-------------------------



#29:	ROOF, ASPHALT SHINGLE
------	-----------------------



#30:	ROOF DRAINAGE
------	---------------



#31:	WINDOWS, METAL STOREFRONT
------	---------------------------



#32:	EXTERIOR DOORS, GLAZED
------	------------------------



#33:	CENTRAL HEATING SYSTEM
------	------------------------



#34:	AIR HANDLER
------	-------------



#35:	PACKAGED TERMINAL HEATER
------	--------------------------



#36:	COMMERCIAL WATER HEATER
------	-------------------------



#37: SINKS VIRTUOUS CHINA



#38: WATER PIPING SYSTEM, DOMESTIC WATER SUPPLY



#39: MOTOR CONTROL CENTER



#40: MAIN DISTRIBUTION PANEL



#41: EXTERIOR LIGHTING



#42: FIRE EXTINGUISHER



#43:	FIRE ALARM CONTROL PANEL
------	--------------------------



#44:	CONFERENCE ROOM
------	-----------------



#45:	LOBBY
------	-------



#46:	OFFICE
------	--------



#47:	KITCHEN
------	---------



#48:	HALLWAY
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Appendix B: Site Plan

Site Plan



Project Name:
Mitchell Elementary

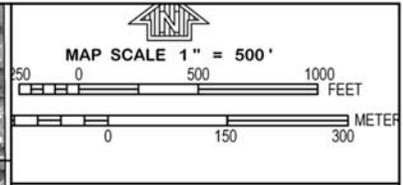
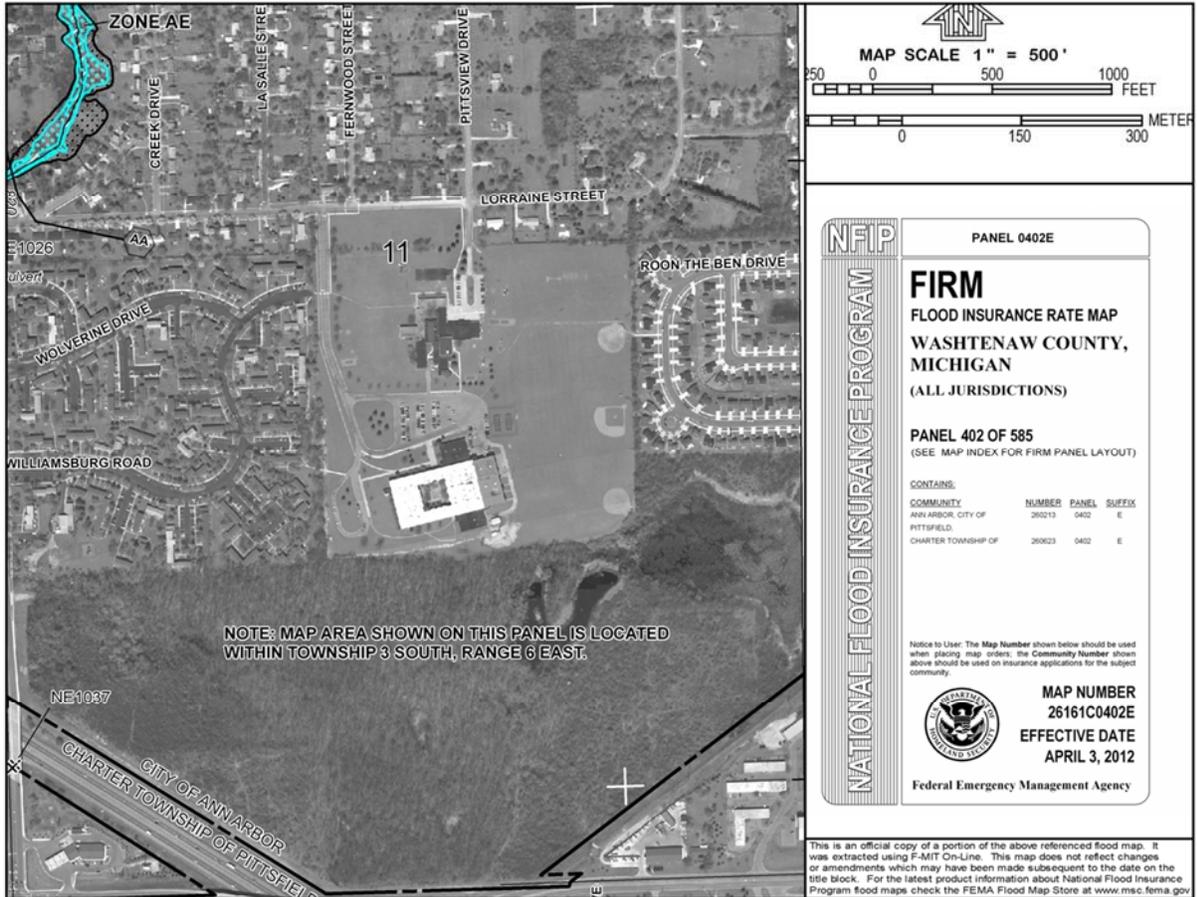
Source:
Google Earth

Project Number:
129010.18R000-002.354

On-Site Date:
January 15 and 16, 2018

Appendix C: Supporting Documentation

Flood Map



NFP

PANEL 0402E

FIRM
FLOOD INSURANCE RATE MAP
WASHTENAW COUNTY,
MICHIGAN
(ALL JURISDICTIONS)

PANEL 402 OF 585
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

<small>COMMUNITY</small>	<small>NUMBER</small>	<small>PANEL</small>	<small>SUFFIX</small>
ANN ARBOR, CITY OF	260213	0402	E
PITTSFIELD, CHARTER TOWNSHIP OF	260623	0402	E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
26161C0402E
EFFECTIVE DATE
APRIL 3, 2012

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

	<p>Project Name: Mitchell Elementary</p>	<p>Project Number: 129010.18R000-002.354</p>
	<p>Source: FEMA</p>	<p>On-Site Date: January 15 and 16, 2018</p>

Appendix D: Pre-Survey Questionnaire

FACILITY CONDITION ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

This questionnaire must be completed by the property owner, the owner's designated representative, or someone knowledgeable about the subject property. **The completed form must be presented to EMG's Field Observer on the day of the site visit.** If the form is not completed, EMG's Project Manager will require **additional time** during the on-site visit with such a knowledgeable person in order to complete the questionnaire. During the site visit, EMG's Field Observer may ask for details associated with selected questions. This questionnaire will be utilized as an exhibit in EMG's final Property Condition Report.

Name of person completing form: Benjamin Huzeman
 Title / Association with property: N/A
 Length of time associated w/ property: N/A
 Date Completed: 9/16/2018
 Phone Number: 417-770-4019
 Building / Facility Name: Mitchell Elementary School

Directions: Please answer all questions to the best of your knowledge and in good faith. Please provide additional details in the Comments column, or backup documentation for any **Yes** responses.

DATA OVERVIEW		RESPONSE
1	Year constructed	<u>1951</u>
2	Building size in SF	<u>43435</u>
3	Acreage	<u>10</u>
4	Number of parking spaces	<u>49</u>
5	Age of roof (known or estimated); active warranty w/ expiration date?	<u>2000 Estimated</u>
QUESTION		RESPONSE
6	List all major renovations or rehabilitations since construction (with estimated dates).	<u>Building addition in 2016</u>
7	List other somewhat lesser but still significant capital improvements, focused within recent years (provide approximate year completed).	<u>Drop ceiling, HVAC in 2007</u>
8	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?	<u>None</u>
9	Describe any extremely problematic, historically chronic, or immediate facility needs.	<u>Needs Fire suppression</u>
10	Describe any shared building or site elements or unique arrangements with neighboring properties, entities, or tenants.	<u>None</u>

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any **Yes** responses. (**NA** indicates "Not Applicable", **Unk** indicates "Unknown")

QUESTION		RESPONSE				COMMENTS
		Yes	No	Unk	NA	
11	Are there any unusable or "down" areas, units, or spaces within the facility?		2			
12	Is the facility served by a private water well, septic system or other special waste treatment system?		2			
13	Are there any problems with the utilities, such as inadequate pressure or capacities?		2			
14	Have there been any leaks or pressure problems with natural gas service?		2			
15	Are there any problems with erosion or areas with storm water drainage issues?		2			
16	Are there any problems with the landscape irrigation systems?				2	
17	Are there any problems or inadequacies with exterior lighting?		2			
18	Are there any problems with foundations or structures, like excessive settlement?	2				Suite 11 water seeps in
19	Are there any known issues with termites or other wood-boring pests?				2	
20	Are there any wall, window, basement or roof leaks?					Roof leaks in the past
21	Are there any plumbing leaks or water pressure problems?		2			
22	Are any areas of the facility inadequately heated, cooled or ventilated?		2			
23	Are there any poorly insulated areas?		2			
24	Do any of the HVAC systems use older R-11, 12, or 22 refrigerants?	2				
25	Has any part of the facility ever contained visible suspect mold growth?		2			
26	Have there been indoor air quality or mold related complaints from building occupants?					

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any **Yes** responses. (**NA** indicates "Not Applicable", **Unk** indicates "Unknown")

QUESTION		RESPONSE				COMMENTS
		Yes	No	Unk	NA	
27	Are there any known unresolved building, fire, or zoning code issues with the governing municipality?		<i>e</i>			
28	Is there any pending litigation concerning the property?		<i>e</i>			
29	Are there outstanding accessibility issues at the facility? (Go over and fill out first 'History' subsection of separate ADA checklist.)		<i>e</i>			
30	Are there any EMG 'red flag' issues at the facility? (Go over and fill out attached checklist below.)		<i>e</i>			
31	Are there any other unresolved construction defects or significant issues/hazards at the property that have not yet been identified?		<i>e</i>			

Signature of person interviewed or completing form

1/16/2018
Date

RED FLAG CHECKLIST & MATRIX

Mark the single column corresponding to the most appropriate situation. (PSQ only indicates POC acknowledged presence during interview but item was not observed on-site; OBS only indicates the item was observed but not identified as known to be present during interview process; PSQ & OBS indicates item was both verbally identified and physically observed; NOT EVID indicates the item was neither observed during limited visual assessment nor identified as present during discussions).						
RED FLAG ISSUE		OBSERVED?				GUIDANCE
		PSQ only	OBS only	PSQ & OBS	NOT EVID	
1	Fire Retardant Plywood (FRT)					1955 to 1998; as roof sheathing; view attics; sometimes stamped; moisture absorbance leads to premature failure
2	Engineered / Hardboard Wood Siding					any time; Masonite, T-111; water damage and premature failure
3	Exterior Insulation and Finish System (EIFS)					any time; water penetration and premature failure (looks like stucco but feels "lighter")
4	Galvanized Water Piping					prior to early 1980's; common in 1970's; pinhole leaks and interior mineral build-up
5	Polybutylene Water Piping					1977-1995; mostly relevant to housing; grey plastic commonly leaks at joint fittings
6	ABS Piping Recall					1984-1990; faulty resin by 5 manufactures; very difficult to discover & visually observe
7	Cadet/Encore Wall Heater Recall					1982-1999; mostly relevant to housing; collect & cross-check model numbers; potential fire hazards
8	PTAC Recall (Goodman/Amana)					1996-2003; mostly relevant to housing; faulty thermal override switch; collect & cross-check model numbers
9	Aluminum Wiring (Interior)					1964-1975; more concerns with interior and smaller gauge
10	Federal Pacific Stab-Lok Electrical Panels					prior to 1986; potential fire hazards
11	Fused Electrical Panels					prior to early 1960's; easily tampered with, as such potential fire hazard
12	Low Unit Amperage					any time; relevant to housing
13	Fire Sprinkler Head Recalls					1960-2001; more heavily 1990's; Central, Gem, Star, Globe, Omega can be suspect; collect & cross-check model numbers
14	Dishwasher Recalls					1983-1989: GE, Hotpoint 1997-2001: GE, Hotpoint, Maytag, Jenn-Air, Kenmore, Eterna collect & cross-check model numbers; potential fire hazards

REQUEST FOR DOCUMENTATION

On the day of the site visit, provide EMG's Field Observer the documents listed below. Signify which documents will be copied, available for review at the site, not available, or not applicable by placing a check mark in the appropriate columns. Also provide this completed checklist.

		Copies Provided	Reviewed at Site	Not Available	Not
1	Maintenance Contractor List. Provide the company name, phone number, and contact person of all maintenance contractors who serve the property, such as mechanical contractors, roof contractors, fire sprinkler and fire alarm testing contractors, and elevator contractors.				
2	Construction Documents (Blueprints). Provide all available construction documents for the original construction of the building or for any tenant improvement work or other recent construction work.				
3	Site plan. Provide a site plan, preferably 8 1/2" X 11", which depicts the arrangement of buildings, roads, parking stalls, and other site features.				
4	Certificates of Occupancy and original Building Permits.				
5	Tenant List. For commercial properties, provide a tenant list, which identifies the names of each tenant, vacant tenant units, the floor area of each tenant space, and the gross and net leasable area of the building(s).				
6	Apartment Unit Summary. For apartment properties, provide a summary of the apartment unit types and quantities, including the floor area of each apartment unit as measured in square feet.				
7	Hotel & Nursing Home Room Summary. For hotel or nursing home properties, provide a summary of the room types and room type quantities, including the floor area of each room type.				
8	Occupancy Percentage. Provide the current occupancy percentage and typical turnover rate records (for commercial and apartment properties).				
9	Inspection Documents and Certificates. Fire, building, and health department inspection reports and elevator inspection certificates.				
10	Warranties. Roof and HVAC warranties, or any other similar relevant documents.				
11	Utility Companies. The names of the local utility companies which serve the property, including the water, sewer, electric, gas, and phone companies.				
12	Capital Improvement Summary. A summary of recent (over the last 5 years) capital improvement work which describes the scope of the work and the cost of the improvements.				
13	Proposed Improvements. Pending contracts or proposals for future improvements.				
14	Historical Costs. Costs for repairs, improvements, and replacements.				
15	Records. Records of system & material ages (roof, MEP, paving, finishes, furnishings).				
16	Brochures or Marketing Information.				
17	Appraisal, either current or previously prepared.				
18	Previous reports pertaining to the physical condition of property.				
19	ADA survey and status of improvements implemented.				
20	Litigation. Current / pending litigation related to property condition.				

WJ Dneil HVAC Contractor former
 district employee Brad Schuster
 District Terry Coklin

On the day of the site visit, provide EMG's Field Observer access to all of the available documents listed below. Provide copies if possible.

<p>INFORMATION REQUIRED</p> <ol style="list-style-type: none"> 1. All available construction documents (blueprints) for the original construction of the building or for any tenant improvement work or other recent construction work. 2. A site plan, preferably 8 1/2" X 11", which depicts the arrangement of buildings, roads, parking stalls, and other site features. 3. For commercial properties, provide a tenant list which identifies the names of each tenant, vacant tenant units, the floor area of each tenant space, and the gross and net leasable area of the building(s). 4. For apartment properties, provide a summary of the apartment unit types and apartment unit type quantities, including the floor area of each apartment unit as measured in square feet. 5. For hotel or nursing home properties, provide a summary of the room types and room type quantities. 6. Copies of Certificates of Occupancy, building permits, fire or health department inspection reports, elevator inspection certificates, roof or HVAC warranties, or any other similar, relevant documents. 7. The names of the local utility companies which serve the property, including the water, sewer, electric, gas, and phone companies. 	<ol style="list-style-type: none"> 8. The company name, phone number, and contact person of all outside vendors who serve the property, such as mechanical contractors, roof contractors, fire sprinkler or fire extinguisher testing contractors, and elevator contractors. 9. A summary of recent (over the last 5 years) capital improvement work which describes the scope of the work and the estimated cost of the improvements. Executed contracts or proposals for improvements. Historical costs for repairs, improvements, and replacements. 10. Records of system & material ages (roof, MEP, paving, finishes, furnishings). 11. Any brochures or marketing information. 12. Appraisal, either current or previously prepared. 13. Current occupancy percentage and typical turnover rate records (for commercial and apartment properties). 14. Previous reports pertaining to the physical condition of property. 15. ADA survey and status of improvements implemented. 16. Current / pending litigation related to property condition.
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Your timely compliance with this request is greatly appreciated.