FACILITY CONDITION ASSESSMENT

prepared for

Ann Arbor Public Schools
2555 South State Street
Ann Arbor, Michigan 48104
Jim Vibbart

FACILITY CONDITION ASSESSMENT

OF

CLAGUE MIDDLE SCHOOL
2616 NIXON ROAD
ANN ARBOR, MICHIGAN 48105

PREPARED BY:
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DATE OF REPORT:
July 2, 2018

ONSITE DATE:
February 1 and 2, 2018

Immediate Repairs Report
Clague Middle School
7/2/2018

Location Name	EMG Renamed Item Number	ID	Cost Description	Quantity	Unit	Unit Cost *	Subtotal	Deficiency Repair Estimate *
Clague Middle School	1.2	846635	Engineer, Environmental, Mold Remediation, Evaluate/Report	1	EA	$4,025.00	$4,025	**$4,025**
Clague Middle School	D30	885580	Air Conditioning, Central, Install	156000	SF	$11.50	$1,794,000	**$1,794,000**
Clague Middle School	B1080	846907	Exterior Stairs, Concrete, Repair	275	SF	$4.46	$1,226	**$1,226**
Clague Middle School	B1080	846599	Interior Stairs/Ramp, , Repair	800	SF	$3.98	$3,187	**$3,187**
Clague Middle School	C2050	846560	Interior Ceiling Finish, Suspended Acoustical Tile (ACT), Repair	1000	SF	$3.57	$3,567	**$3,567**
Clague Middle School	D20	846649	Drinking Fountain, Vitreous China, Replace	4	EA	$2,229.84	$8,919	**$8,919**
Clague Middle School	D50	846905	Secondary Transformer, Dry, 113 kVA, Replace	1	EA	$13,708.06	$13,708	**$13,708**
Clague Middle School		958702	Davis Bacon Prevailing Wages, Surcharge for Prevailing Wages, 10% surcharge for prevailing wages	110096.18	LS	$1.15	$126,611	**$126,611**
Clague Middle School	G2030	846912	Roadways, Concrete Curb & Gutter, Repair	500	LF	$27.59	$13,797	**$13,797**
Immediate Repairs Total								**$1,969,040**

* Location Factor included in totals.

Replacement Reserves Report

Clague Middle School

7/2/2018

Location Name	EMG Renamed Item Number	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	RRR_RowGrandTotalLabel
Clague Middle School	1.2	846635	Engineer, Environmental, Mold Remediation, Evaluate/Report	0	0	0	1	EA	$3,500.00	$4,025.00	$4,025	$4,025																				**$4,025**
Clague Middle School	8.0	847253	Exterior Wall, Painted Surface, 1-2 Stories, Prep & Paint	10	7	3	550	SF	$2.87	$3.30	$1,816				$1,816									$1,816								**$3,631**
Clague Middle School	8.0	846943	Exterior Wall, Concrete Block (CMU), 1-2 Stories, Repoint	25	22	3	550	SF	$8.16	$9.39	$5,162				$5,162																	**$5,162**
Clague Middle School	8.0	847261	Exterior Door, Steel, Replace	25	22	3	1	EA	$950.12	$950.12	$950				$950																	**$950**
Clague Middle School	8.0	847262	Overhead Door, Aluminum Roll-Up 144 SF, Replace	35	32	3	1	EA	$4,025.54	$4,629.37	$4,629				$4,629																	**$4,629**
Clague Middle School	8.0	847259	Roof, Asphalt Shingle, Replace	20	19	1	270	SF	$3.42	$3.42	$924		$924																			**$924**
Clague Middle School	D30	885580	Air Conditioning, Central, Install	50	50	0	156000	SF	$10.00	$11.50	$1,794,000	$1,794,000																				**$1,794,000**
Clague Middle School	B1080	846907	Exterior Stairs, Concrete, Repair	0	0	0	275	SF	$3.88	$4.46	$1,226	$1,226																				**$1,226**
Clague Middle School	B2010	846934	Exterior Wall, Painted Surface, 1-2 Stories, Prep & Paint	10	9	1	7900	SF	$2.87	$3.30	$26,080		$26,080										$26,080									**$52,161**
Clague Middle School	B2010	846942	Exterior Wall, Brick or Brick Veneer, 1-2 Stories, Repoint	25	22	3	22500	SF	$41.28	$47.47	$1,068,187				$1,068,187																	**$1,068,187**
Clague Middle School	B2020	846941	Window, SF, Replace	30	27	3	233	EA	$584.21	$671.84	$156,538				$156,538																	**$156,538**
Clague Middle School	B2020	846947	Storefront, Metal-Framed Windows w/out Door(s), Replace	30	27	3	1597	SF	$48.00	$55.20	$88,154				$88,154																	**$88,154**
Clague Middle School	B2050	846954	Exterior Door, Steel, Replace	25	22	3	18	EA	$950.12	$1,092.64	$19,667				$19,667																	**$19,667**
Clague Middle School	B2050	846925	Exterior Door, Steel w/ Safety Glass, Replace	25	22	3	33	EA	$1,352.72	$1,555.63	$51,336				$51,336																	**$51,336**
Clague Middle School	B2050	846913	Overhead Door, Wood Roll-Up 288 SF, Replace	35	32	3	1	EA	$7,987.36	$9,185.47	$9,185				$9,185																	**$9,185**
Clague Middle School	B2050	846952	Overhead Door, Wood Roll-Up 144 SF, Replace	35	32	3	1	EA	$2,634.03	$3,029.14	$3,029				$3,029																	**$3,029**
Clague Middle School	B3010	846555	Roof, Single-Ply EPDM Membrane, Replace	20	13	7	78000	SF	$10.52	$12.10	$943,644								$943,644													**$943,644**
Clague Middle School	C10	846671	Movable Partitions, Fabric Office 6' Height, Replace	25	22	3	40	LF	$26.79	$30.81	$1,232				$1,232																	**$1,232**
Clague Middle School	C1030	846640	Interior Door, Wood Solid-Core w/ Safety Glass, Replace	20	17	3	25	EA	$1,928.03	$2,217.23	$55,431				$55,431																	**$55,431**
Clague Middle School	C1030	846568	Interior Door, Steel w/ Safety Glass, Replace	20	17	3	5	EA	$1,352.72	$1,555.63	$7,778				$7,778																	**$7,778**
Clague Middle School	C1030	846606	Interior Door, Wood Hollow-Core, Replace	20	17	3	50	EA	$596.52	$686.00	$34,300				$34,300																	**$34,300**
Clague Middle School	C1030	846592	Interior Door, Steel, Replace	25	18	7	25	EA	$950.12	$1,092.64	$27,316								$27,316													**$27,316**
Clague Middle School	D70	946172	Exterior Door Hardware, Electronic Locks ANSI F39 Lockset, Replace	30	29	1	33	EA	$573.00	$658.95	$21,745		$21,745																			**$21,745**
Clague Middle School	C10	846605	Toilet Partitions, Metal Overhead-Braced, Replace	20	17	3	24	EA	$850.00	$977.50	$23,460				$23,460																	**$23,460**
Clague Middle School	C10	846580	Lockers, Steel Baked Enamel 12" W x 15" D x 72" H, 1 to 5 Tiers, Replace	20	17	3	200	LF	$482.50	$554.88	$110,975				$110,975																	**$110,975**
Clague Middle School	B1080	846599	Interior Stairs/Ramp, , Repair	0	0	0	800	SF	$3.46	$3.98	$3,187	$3,187																				**$3,187**
Clague Middle School	C2010	846662	Interior Wall Finish, Concrete Block, Repoint	25	24	1	1000	SF	$7.15	$8.22	$8,223		$8,223																			**$8,223**
Clague Middle School	C2010	846533	Interior Wall Finish, Gypsum Board/Plaster/Metal, Prep & Paint	8	5	3	115440	SF	$1.42	$1.64	$188,938				$188,938							$188,938								$188,938		**$566,815**
Clague Middle School	C2010	846652	Interior Wall Finish, Ceramic Tile, Replace	25	22	3	46800	SF	$16.55	$19.04	$890,936				$890,936																	**$890,936**
Clague Middle School	C2010	846548	Interior Wall Finish, Tectrum, Replace	10	7	3	46800	SF	$7.57	$8.71	$407,407				$407,407									$407,407								**$814,813**
Clague Middle School	C2010	846565	Interior Wall Finish, Concrete/Masonry, Prep & Paint	8	5	3	173160	SF	$1.45	$1.67	$288,943				$288,943							$288,943								$288,943		**$866,830**
Clague Middle School	C2030	846676	Interior Floor Finish, Maple Sports Floor, Replace	30	29	1	1000	SF	$10.25	$11.79	$11,789		$11,789																			**$11,789**
Clague Middle School	C2030	846554	Interior Floor Finish, Wood Strip, Refinish	10	7	3	1000	SF	$3.68	$4.23	$4,229				$4,229									$4,229								**$8,458**
Clague Middle School	C2030	846603	Interior Floor Finish, Vinyl Tile (VCT), Replace	15	12	3	85800	SF	$4.80	$5.52	$473,675				$473,675															$473,675		**$947,350**
Clague Middle School	C2030	846588	Interior Floor Finish, Ceramic Tile, Replace	50	46	4	23400	SF	$15.76	$18.12	$423,967					$423,967																**$423,967**
Clague Middle School	C2030	846591	Interior Floor Finish, Quarry Tile, Replace	50	46	4	500	SF	$15.19	$17.47	$8,733					$8,733																**$8,733**
Clague Middle School	C2030	846609	Interior Floor Finish, Carpet Tile Commercial-Grade, Replace	10	7	3	46800	SF	$6.96	$8.01	$374,743				$374,743									$374,743								**$749,487**
Clague Middle School	C2050	846664	Interior Ceiling Finish, Exposed/Generic, Prep & Paint	10	9	1	1000	SF	$2.27	$2.61	$2,611		$2,611										$2,611									**$5,221**
Clague Middle School	C2050	846538	Interior Ceiling Finish, Gypsum Board/Plaster, Prep & Paint	10	7	3	54600	SF	$1.94	$2.23	$121,599				$121,599									$121,599								**$243,198**
Clague Middle School	C2050	846560	Interior Ceiling Finish, Suspended Acoustical Tile (ACT), Repair	0	0	0	1000	SF	$3.10	$3.57	$3,567	$3,567																				**$3,567**
Clague Middle School	C2050	846564	Interior Ceiling Finish, Suspended Acoustical Tile (ACT), Replace	20	17	3	78000	SF	$3.11	$3.58	$279,057				$279,057																	**$279,057**
Clague Middle School	C2050	846672	Interior Ceiling Finish, Tectrum, Replace	20	17	3	23400	SF	$3.11	$3.58	$83,717				$83,717																	**$83,717**
Clague Middle School	D10	846673	Elevator Controls, Automatic, 1 or 2 Car Cluster, Modernize	20	17	3	1	EA	$11,547.25	$13,279.34	$13,279				$13,279																	**$13,279**
Clague Middle School	D10	846559	Elevator, Hydraulic, 2500 LB, 2 Floors, Renovate	30	27	3	1	EA	$108,794.40	$125,113.56	$125,114				$125,114																	**$125,114**
Clague Middle School	D20	846647	Toilet, Tankless (Water Closet), Replace	20	17	3	29	EA	$842.97	$969.41	$28,113				$28,113																	**$28,113**
Clague Middle School	D20	846546	Urinal, Vitreous China, Replace	20	17	3	11	EA	$1,193.44	$1,372.46	$15,097				$15,097																	**$15,097**
Clague Middle School	D20	846643	Lavatory, Vitreous China, Replace	20	17	3	36	EA	$572.66	$658.56	$23,708				$23,708																	**$23,708**
Clague Middle School	D20	846573	Service Sink, Porcelain Enamel, Cast Iron, Replace	20	17	3	1	EA	$1,360.33	$1,564.38	$1,564				$1,564																	**$1,564**
Clague Middle School	D20	846629	Sink, Vitreous China, Replace	20	17	3	1	EA	$861.51	$861.51	$862				$862																	**$862**
Clague Middle School	D20	846681	Gang Sink, Stainless Steel, Replace	20	17	3	1	EA	$1,054.05	$2,266.21	$2,266				$2,266																	**$2,266**
Clague Middle School	D20	846598	Sink, Stainless Steel, Replace	20	17	3	25	EA	$1,054.05	$1,212.16	$30,304				$30,304																	**$30,304**
Clague Middle School	D20	846616	Sink, Pot, Multi-compartment, Replace	30	18	12	10	LF	$1,262.50	$1,451.88	$14,519												$14,519									**$14,519**
Clague Middle School	D20	846645	Service Sink, Floor, Replace	35	18	17	5	EA	$1,599.51	$1,839.44	$9,197																	$9,197				**$9,197**
Clague Middle School	D20	846669	Shower, Ceramic Tile, Replace	30	27	3	27	EA	$1,983.78	$2,281.35	$61,596				$61,596																	**$61,596**
Clague Middle School	D20	846649	Drinking Fountain, Vitreous China, Replace	15	15	0	4	EA	$1,938.99	$2,229.84	$8,919	$8,919														$8,919						**$17,839**
Clague Middle School	D20	846644	Drinking Fountain, Refrigerated, Replace	10	7	3	18	EA	$1,257.51	$1,446.13	$26,030				$26,030										$26,030							**$52,061**

Location Name	EMG Renamed Item Number	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	RRR_RowGrandTotalLabel
Clague Middle School	D20	846641	Emergency Eye Wash, , Replace	15	12	3	8	EA	$1,417.04	$1,629.60	$13,037				$13,037															$13,037		**$26,074**
Clague Middle School	D20	846683	Backflow Preventer, 4 INCH, Replace	15	12	3	1	EA	$6,001.42	$6,901.63	$6,902				$6,902															$6,902		**$13,803**
Clague Middle School	G2060	846951	Domestic Circulator or Booster Pump, 5 to 7.5 HP, Replace	20	17	3	1	EA	$11,641.34	$13,387.55	$13,388				$13,388																	**$13,388**
Clague Middle School	G2060	846931	Domestic Circulator or Booster Pump, 5 HP, Replace	20	17	3	1	EA	$11,641.34	$13,387.55	$13,388				$13,388																	**$13,388**
Clague Middle School	D20	846562	Water Storage Tank, 200 GAL, Replace	20	17	3	1	EA	$2,778.24	$3,194.97	$3,195				$3,195																	**$3,195**
Clague Middle School	D20	846657	Water Softener, 10 GAL, Replace	15	12	3	1	EA	$2,827.74	$3,251.90	$3,252				$3,252															$3,252		**$6,504**
Clague Middle School	D20	846628	Water Heater, 745 MBH, Replace	22	18	4	1	EA	$34,559.38	$39,743.29	$39,743					$39,743																**$39,743**
Clague Middle School	D20	846642	Water Heater, 80 GAL, Replace	15	10	5	1	EA	$6,963.24	$8,007.73	$8,008						$8,008															**$8,008**
Clague Middle School	D30	846567	Gas Distribution System, 5 HP, Replace	20	17	3	1	EA	$9,652.21	$11,100.05	$11,100				$11,100																	**$11,100**
Clague Middle School		960796	Solar Instillation Project, Roof Mounted Solar Instillation, Install	20	18	2	1068000	SF	$1.00	$1.15	$1,228,200			$1,228,200																		**$1,228,200**
Clague Middle School	D30	846655	Boiler, 12,000 MBH, Replace	25	18	7	1	EA	$332,867.50	$382,797.62	$382,798								$382,798													**$382,798**
Clague Middle School	D30	846539	Boiler, 12,000 MBH, Replace	25	18	7	1	EA	$332,867.50	$382,797.62	$382,798								$382,798													**$382,798**
Clague Middle School	D30	846584	Chemical Feed System, , Replace	25	18	7	1	EA	$10,642.24	$12,238.58	$12,239								$12,239													**$12,239**
Clague Middle School	D30	846542	Split System, 3 TON, Replace	15	11	4	1	EA	$3,578.67	$4,115.46	$4,115					$4,115															$4,115	**$8,231**
Clague Middle School	D30	847139	Ductless Split System, Single Zone, 2.5 Ton, Replace	15	6	9	1	EA	$6,577.13	$7,563.70	$7,564										$7,564											**$7,564**
Clague Middle School	D30	846579	Ductless Split System, Single Zone, 2.5 Ton, Replace	15	6	9	1	EA	$6,577.13	$7,563.70	$7,564										$7,564											**$7,564**
Clague Middle School	D30	846630	Ductless Split System, Single Zone, 3 Ton, Replace	15	6	9	1	EA	$6,577.13	$7,563.70	$7,564										$7,564											**$7,564**
Clague Middle School	D30	847133	Ductless Split System, Single Zone, 3 Ton, Replace	15	6	9	1	EA	$6,577.13	$7,563.70	$7,564										$7,564											**$7,564**
Clague Middle School	D30	846536	Ductless Split System, Single Zone, 3 Ton, Replace	15	6	9	1	EA	$6,577.13	$7,563.70	$7,564										$7,564											**$7,564**
Clague Middle School	D30	846648	Ductless Split System, Single Zone, 2.5 Ton, Replace	15	6	9	1	EA	$6,577.13	$7,563.70	$7,564										$7,564											**$7,564**
Clague Middle School	D30	847138	Ductless Split System, Single Zone, 2.5 Ton, Replace	15	6	9	1	EA	$6,577.13	$7,563.70	$7,564										$7,564											**$7,564**
Clague Middle School	D30	847137	Ductless Split System, Single Zone, 1.5 Ton, Replace	15	5	10	1	EA	$4,473.11	$5,144.08	$5,144											$5,144										**$5,144**
Clague Middle School	D30	846611	Condenser, 1 TON, Replace	15	4	11	1	EA	$2,310.35	$2,656.90	$2,657												$2,657									**$2,657**
Clague Middle School	D30	846602	Air Handler, 15001 - 20000 CFM, Replace	30	27	3	1	EA	$54,822.31	$63,045.66	$63,046				$63,046																	**$63,046**
Clague Middle School	D30	846690	Air Handler, 700 CFM, Replace	20	11	9	1	EA	$3,351.83	$3,854.61	$3,855										$3,855											**$3,855**
Clague Middle School	D30	846695	Air Handler, 13600 CFM, Replace	30	17	13	1	EA	$41,979.17	$48,276.05	$48,276														$48,276							**$48,276**
Clague Middle School	D30	846685	Air Handler, 12000 CFM, Replace	30	11	19	1	EA	$41,979.17	$48,276.05	$48,276																				$48,276	**$48,276**
Clague Middle School	D30	846668	Air Handler, 8400 CFM, Replace	30	11	19	1	EA	$31,181.53	$35,858.76	$35,859																				$35,859	**$35,859**
Clague Middle School	D30	846543	Air Handler, Interior, 7,720 CFM, Replace	30	11	19	1	EA	$26,016.62	$29,919.11	$29,919																				$29,919	**$29,919**
Clague Middle School	D30	846552	Air Handler, 10001 - 15000 CFM, Replace	30	11	19	1	EA	$41,979.17	$48,276.05	$48,276																				$48,276	**$48,276**
Clague Middle School	D30	846590	Exhaust Fan, 801 - 2000 CFM, Replace	15	12	3	1	EA	$2,664.18	$3,063.80	$3,064				$3,064															$3,064		**$6,128**
Clague Middle School	D30	846597	Exhaust Fan, 801 - 2000 CFM, Replace	15	12	3	1	EA	$2,664.18	$3,063.80	$3,064				$3,064															$3,064		**$6,128**
Clague Middle School	D30	846677	Exhaust Fan, 10001 - 16000 CFM, Replace	15	12	3	1	EA	$10,167.07	$11,692.13	$11,692				$11,692															$11,692		**$23,384**
Clague Middle School	D30	846623	Exhaust Fan, CFM, Replace	15	12	3	1	EA	$2,664.18	$3,063.80	$3,064				$3,064															$3,064		**$6,128**
Clague Middle School	D30	846921	Exhaust Fan, Roof Mounted, 801 to 1,000 CFM, Replace	15	12	3	1	EA	$1,769.49	$2,034.91	$2,035				$2,035															$2,035		**$4,070**
Clague Middle School	D30	846576	Exhaust Fan, 801 - 2000 CFM, Replace	15	12	3	1	EA	$2,664.18	$3,063.80	$3,064				$3,064															$3,064		**$6,128**
Clague Middle School	D30	846687	Exhaust Fan, 10001 - 16000 CFM, Replace	15	12	3	1	EA	$10,167.07	$11,692.13	$11,692				$11,692															$11,692		**$23,384**
Clague Middle School	D30	846631	Exhaust Fan, 8001 - 10000 CFM, Replace	15	12	3	1	EA	$7,685.96	$8,838.86	$8,839				$8,839															$8,839		**$17,678**
Clague Middle School	D30	846903	Exhaust Fan, Roof Mounted, 801 to 1,000 CFM, Replace	15	12	3	1	EA	$1,769.49	$2,034.91	$2,035				$2,035															$2,035		**$4,070**
Clague Middle School	D30	846944	Exhaust Fan, Roof Mounted, 801 to 1,000 CFM, Replace	15	12	3	1	EA	$1,769.49	$2,034.91	$2,035				$2,035															$2,035		**$4,070**
Clague Middle School	D30	846571	Exhaust Fan, CFM, Replace	15	12	3	1	EA	$5,570.04	$6,405.54	$6,406				$6,406															$6,406		**$12,811**
Clague Middle School	D30	846675	Exhaust Fan, 801 - 2000 CFM, Replace	15	12	3	1	EA	$2,664.18	$3,063.80	$3,064				$3,064															$3,064		**$6,128**
Clague Middle School	D30	846575	Exhaust Fan, CFM, Replace	15	12	3	1	EA	$3,072.78	$3,533.69	$3,534				$3,534															$3,534		**$7,067**
Clague Middle School	D30	846534	Exhaust Fan, 801 - 2000 CFM, Replace	15	12	3	1	EA	$2,664.18	$3,063.80	$3,064				$3,064															$3,064		**$6,128**
Clague Middle School	D30	846535	Exhaust Fan, CFM, Replace	15	12	3	1	EA	$3,072.78	$3,533.69	$3,534				$3,534															$3,534		**$7,067**
Clague Middle School	D30	846607	Exhaust Fan, 801 - 2000 CFM, Replace	15	12	3	1	EA	$2,664.18	$3,063.80	$3,064				$3,064															$3,064		**$6,128**
Clague Middle School	D30	846578	Exhaust Fan, 801 - 2000 CFM, Replace	15	12	3	1	EA	$2,664.18	$3,063.80	$3,064				$3,064															$3,064		**$6,128**
Clague Middle School	D30	846654	Exhaust Fan, 801 - 2000 CFM, Replace	15	12	3	1	EA	$2,664.18	$3,063.80	$3,064				$3,064															$3,064		**$6,128**
Clague Middle School	D30	846670	Exhaust Fan, 2001 - 5000 CFM, Replace	15	11	4	1	EA	$2,762.86	$3,177.29	$3,177					$3,177															$3,177	**$6,355**
Clague Middle School	D30	846682	Exhaust Fan, 1001 - 1500 CFM, Replace	15	11	4	1	EA	$1,927.94	$2,217.13	$2,217					$2,217															$2,217	**$4,434**
Clague Middle School	D30	846665	Exhaust Fan, 1501 - 2000 CFM, Replace	15	11	4	1	EA	$2,762.86	$3,177.29	$3,177					$3,177															$3,177	**$6,355**
Clague Middle School	D30	846663	Exhaust Fan, 1001 - 1500 CFM, Replace	15	11	4	1	EA	$1,927.94	$2,217.13	$2,217					$2,217															$2,217	**$4,434**
Clague Middle School	D30	846674	Exhaust Fan, 1001 - 1500 CFM, Replace	15	11	4	1	EA	$1,927.94	$2,217.13	$2,217					$2,217															$2,217	**$4,434**
Clague Middle School	D30	846622	Exhaust Fan, 801 - 2000 CFM, Replace	15	10	5	1	EA	$2,664.18	$3,063.80	$3,064						$3,064															**$3,064**
Clague Middle School	D30	846561	Exhaust Fan, 801 - 2000 CFM, Replace	15	10	5	1	EA	$2,664.18	$3,063.80	$3,064						$3,064															**$3,064**
Clague Middle School	D30	846612	Exhaust Fan, 801 - 2000 CFM, Replace	15	10	5	1	EA	$2,664.18	$3,063.80	$3,064						$3,064															**$3,064**
Clague Middle School	D30	846594	Exhaust Fan, 801 - 2000 CFM, Replace	15	10	5	1	EA	$2,664.18	$3,063.80	$3,064						$3,064															**$3,064**
Clague Middle School	D30	846557	Exhaust Fan, 5001 - 8000 CFM, Replace	15	9	6	1	EA	$7,685.96	$8,838.86	$8,839							$8,839														**$8,839**
Clague Middle School	D30	846620	Exhaust Fan, 2001 - 3500 CFM, Replace	15	9	6	1	EA	$3,072.78	$3,533.69	$3,534							$3,534														**$3,534**
Clague Middle School	D30	846615	Exhaust Fan, 801 - 2000 CFM, Replace	15	7	8	1	EA	$2,664.18	$3,063.80	$3,064									$3,064												**$3,064**
Clague Middle School	D20	846618	Circulation Pump, 3 HP, Replace	20	18	2	1	EA	$4,652.29	$5,350.13	$5,350			$5,350																		**$5,350**

Location Name	EMG Renamed Item Number	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	RRR_RowGrandTotalLabel
Clague Middle School	D20	846572	Circulation Pump, 3 HP, Replace	20	17	3	1	EA	$4,652.29	$5,350.13	$5,350				$5,350																	**$5,350**
Clague Middle School	D20	846601	Circulation Pump, 5 HP, Replace	20	17	3	1	EA	$5,518.88	$6,346.72	$6,347				$6,347																	**$6,347**
Clague Middle School	D20	846556	Circulation Pump, 5 HP, Replace	20	17	3	1	EA	$5,518.88	$6,346.72	$6,347				$6,347																	**$6,347**
Clague Middle School	D20	846697	Circulation Pump, 5 HP, Replace	20	17	3	1	EA	$5,518.88	$6,346.72	$6,347				$6,347																	**$6,347**
Clague Middle School	D20	846678	Circulation Pump, 5 HP, Replace	20	17	3	1	EA	$5,518.88	$6,346.72	$6,347				$6,347																	**$6,347**
Clague Middle School	D20	846625	Circulation Pump, 5 HP, Replace	20	17	3	1	EA	$5,518.88	$6,346.72	$6,347				$6,347																	**$6,347**
Clague Middle School	D30	846666	Unit Heater, 5 - 10 MBH, Replace	20	17	3	1	EA	$3,766.57	$4,331.56	$4,332				$4,332																	**$4,332**
Clague Middle School	D30	846639	Baseboard Heater, Electric, 6', 1500 Watts, Replace	25	18	7	50	EA	$239.58	$275.52	$13,776								$13,776													**$13,776**
Clague Middle School	D30	846627	Packaged Unit (RTU), 3 Ton, Replace	15	12	3	1	EA	$9,871.90	$11,352.69	$11,353				$11,353															$11,353		**$22,705**
Clague Middle School	D30	846693	Package Unit, 5 TON, Replace	15	12	3	1	EA	$11,239.29	$12,925.18	$12,925				$12,925															$12,925		**$25,850**
Clague Middle School	D30	846661	Building Automation System (HVAC Controls), , Upgrade	20	17	3	156000	SF	$5.36	$6.17	$962,033				$962,033																	**$962,033**
Clague Middle School	D40	846957	Sprinkler Heads (per EA), , Replace	20	17	3	4	EA	$132.98	$132.98	$532				$532																	**$532**
Clague Middle School	D40	846608	Sprinkler System, Full Retrofit, School (per SF), Renovate	50	46	4	156000	SF	$6.25	$7.19	$1,121,878					$1,121,878																**$1,121,878**
Clague Middle School	D40	846646	Fire Extinguisher, , Replace	15	1	14	56	EA	$356.54	$410.02	$22,961														$22,961							**$22,961**
Clague Middle School	D50	846905	Secondary Transformer, Dry, 113 kVA, Replace	30	30	0	1	EA	$11,920.05	$13,708.06	$13,708	$13,708																				**$13,708**
Clague Middle School	D50	846660	Distribution Panel, 400 AMP, Replace	30	27	3	1	EA	$9,487.85	$10,911.03	$10,911				$10,911																	**$10,911**
Clague Middle School	D50	846656	Distribution Panel, 400 AMP, Replace	30	27	3	1	EA	$9,487.85	$10,911.03	$10,911				$10,911																	**$10,911**
Clague Middle School	D50	846537	Switchboard, 2000 AMP, Replace	30	27	3	1	EA	$29,404.36	$33,815.02	$33,815				$33,815																	**$33,815**
Clague Middle School	D50	846910	Secondary Transformer, Dry, 113 kVA, Replace	30	27	3	1	EA	$11,920.05	$13,708.06	$13,708				$13,708																	**$13,708**
Clague Middle School	D50	846650	Distribution Panel, 100 AMP, Replace	30	27	3	1	EA	$7,242.19	$8,328.52	$8,329				$8,329																	**$8,329**
Clague Middle School	D50	846908	Secondary Transformer, Dry, 113 kVA, Replace	30	27	3	1	EA	$11,920.05	$13,708.06	$13,708				$13,708																	**$13,708**
Clague Middle School	D50	846541	Distribution Panel, 100 AMP, Replace	30	27	3	1	EA	$5,079.93	$5,841.92	$5,842				$5,842																	**$5,842**
Clague Middle School	D50	846694	Distribution Panel, 125 AMP, Replace	30	27	3	1	EA	$5,079.93	$5,841.92	$5,842				$5,842																	**$5,842**
Clague Middle School	D50	846696	Distribution Panel, 200 AMP, Replace	30	27	3	1	EA	$7,906.20	$9,092.13	$9,092				$9,092																	**$9,092**
Clague Middle School	D50	846922	Distribution Panel, 225 AMP, Replace	30	27	3	1	EA	$7,951.00	$9,143.65	$9,144				$9,144																	**$9,144**
Clague Middle School	D50	846946	Secondary Transformer, Dry, 150 kVA, Replace	30	27	3	1	EA	$15,803.27	$18,173.76	$18,174				$18,174																	**$18,174**
Clague Middle School	D50	846917	Variable Frequency Drive (VFD), 10 HP Motor, Replace	20	17	3	1	EA	$6,304.96	$7,250.70	$7,251				$7,251																	**$7,251**
Clague Middle School	D50	846926	Secondary Transformer, Dry, 225 kVA, Replace	30	27	3	1	EA	$17,034.70	$19,589.91	$19,590				$19,590																	**$19,590**
Clague Middle School	D50	847144	Variable Frequency Drive (VFD), 5 HP Motor, Replace	20	17	3	1	EA	$4,748.96	$5,461.30	$5,461				$5,461																	**$5,461**
Clague Middle School	D50	846680	Distribution Panel, 200 AMP, Replace	30	27	3	1	EA	$7,906.20	$9,092.13	$9,092				$9,092																	**$9,092**
Clague Middle School	D50	846593	Distribution Panel, 100 AMP, Replace	30	27	3	1	EA	$5,079.93	$5,841.92	$5,842				$5,842																	**$5,842**
Clague Middle School	D50	846596	Secondary Transformer, 112.5 kVA, Replace	30	27	3	1	EA	$11,920.05	$13,708.06	$13,708				$13,708																	**$13,708**
Clague Middle School	D50	846531	Distribution Panel, 100 AMP, Replace	30	27	3	1	EA	$7,242.19	$8,328.52	$8,329				$8,329																	**$8,329**
Clague Middle School	D50	846614	Distribution Panel, 250 AMP, Replace	30	18	12	1	EA	$7,951.00	$9,143.65	$9,144												$9,144									**$9,144**
Clague Middle School	D50	846550	Distribution Panel, 100 AMP, Replace	30	18	12	1	EA	$5,079.93	$5,841.92	$5,842												$5,842									**$5,842**
Clague Middle School	D50	846621	Distribution Panel, 125 AMP, Replace	30	18	12	1	EA	$5,079.93	$5,841.92	$5,842												$5,842									**$5,842**
Clague Middle School	D50	846634	Distribution Panel, 100 AMP, Replace	30	18	12	1	EA	$5,079.93	$5,841.92	$5,842												$5,842									**$5,842**
Clague Middle School	D50	846651	Distribution Panel, 125 AMP, Replace	30	18	12	1	EA	$5,079.93	$5,841.92	$5,842												$5,842									**$5,842**
Clague Middle School	D50	846545	Distribution Panel, 125 AMP, Replace	30	18	12	1	EA	$5,079.93	$5,841.92	$5,842												$5,842									**$5,842**
Clague Middle School	D50	846692	Distribution Panel, 100 AMP, Replace	30	18	12	1	EA	$7,242.19	$8,328.52	$8,329												$8,329									**$8,329**
Clague Middle School	D50	846613	Secondary Transformer, 30 kVA, Replace	30	18	12	1	EA	$6,086.36	$6,999.32	$6,999												$6,999									**$6,999**
Clague Middle School	D50	846558	Distribution Panel, 225 AMP, Replace	30	18	12	1	EA	$7,951.00	$9,143.65	$9,144												$9,144									**$9,144**
Clague Middle School	D50	846589	Distribution Panel, 225 AMP, Replace	30	18	12	1	EA	$7,951.00	$9,143.65	$9,144												$9,144									**$9,144**
Clague Middle School	D50	846574	Distribution Panel, 150 AMP, Replace	30	18	12	1	EA	$5,079.93	$5,841.92	$5,842												$5,842									**$5,842**
Clague Middle School	D50	846679	Distribution Panel, 250 AMP, Replace	30	11	19	1	EA	$7,951.00	$9,143.65	$9,144																				$9,144	**$9,144**
Clague Middle School	D50	846691	Secondary Transformer, 45 kVA, Replace	30	11	19	1	EA	$6,857.93	$7,886.62	$7,887																				$7,887	**$7,887**
Clague Middle School	D50	846688	Distribution Panel, 250 AMP, Replace	30	11	19	1	EA	$7,951.00	$9,143.65	$9,144																				$9,144	**$9,144**
Clague Middle School	G4050	846928	LED Lighting Fixture, Basic, 11 W, Replace	20	5	15	24	EA	$180.19	$207.21	$4,973															$4,973						**$4,973**
Clague Middle School	D50	846595	Lighting System, Interior, School, Upgrade	25	21	4	156000	SF	$15.36	$17.67	$2,756,194					$2,756,194																**$2,756,194**
Clague Middle School	D60	946171	Intercom Master Station, Replace	20	19	1	1	EA	$3,814.50	$4,386.67	$4,387		$4,387																			**$4,387**
Clague Middle School	D70	846581	Intercom Speaker, , Replace	20	17	3	60	EA	$575.09	$661.35	$39,681				$39,681																	**$39,681**
Clague Middle School	D50	945790	Clock and Bell System, Wireless or Ethernet Enabled, Up To 100 Total Clocks / Bells, Replace	15	14	1	156000	SF	$0.51	$0.59	$91,494		$91,494															$91,494				**$182,988**
Clague Middle School	C10	846617	Time Control Clock, , Replace	15	12	3	84	EA	$320.18	$368.20	$30,929				$30,929															$30,929		**$61,858**
Clague Middle School	D40	846638	Fire Alarm System, School, Upgrade	20	17	3	156000	SF	$3.13	$3.60	$561,827				$561,827																	**$561,827**
Clague Middle School	D70	846566	Fire Alarm Control Panel, Addressable, Replace	15	12	3	1	EA	$20,297.59	$23,342.23	$23,342				$23,342															$23,342		**$46,684**
Clague Middle School	D70	846553	Security/Surveillance System, Cameras and CCTV, Upgrade	10	7	3	156000	SF	$4.35	$5.00	$779,888				$779,888										$779,888							**$1,559,775**
Clague Middle School	D40	846582	Exit Lighting Fixture, w/ Battery, Replace	10	7	3	56	EA	$418.95	$481.79	$26,980				$26,980										$26,980							**$53,961**
Clague Middle School	D20	846600	Sink, Epoxy Resin, Laboratory, Replace	15	12	3	62	EA	$649.50	$746.92	$46,309				$46,309															$46,309		**$92,619**
Clague Middle School	D30	846949	Dust Collection System, , Replace	30	27	3	1	EA	$9,653.72	$11,101.78	$11,102				$11,102																	**$11,102**
Clague Middle School	D40	846626	Defibrillator, Cabinet Mounted, Replace	5	2	3	1	EA	$1,409.50	$1,620.93	$1,621				$1,621					$1,621					$1,621					$1,621		**$6,484**
Clague Middle School	E10	846636	Commercial Kitchen, Salad Table, Replace	15	12	3	1	EA	$4,301.96	$4,947.26	$4,947				$4,947															$4,947		**$9,895**

Location Name	EMG Renamed Item Number	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	RRR_RowGrandTotalLabel
Clague Middle School	E10	846637	Commercial Kitchen, Refrigerator, 2-Door Reach-In, Replace	15	12	3	1	EA	$4,256.00	$4,894.40	$4,894				$4,894															$4,894		**$9,789**
Clague Middle School	E10	846532	Commercial Kitchen, Garbage Disposal, 1 to 3 HP, Replace	15	12	3	1	EA	$3,434.22	$3,949.36	$3,949				$3,949															$3,949		**$7,899**
Clague Middle School	E10	846658	Commercial Kitchen, Refrigerator, 2-Door Reach-In, Replace	15	12	3	1	EA	$4,256.00	$4,894.40	$4,894				$4,894															$4,894		**$9,789**
Clague Middle School	E10	846583	Commercial Kitchen, Food Warmer, Replace	15	12	3	1	EA	$1,551.91	$1,784.69	$1,785				$1,785															$1,785		**$3,569**
Clague Middle School	E10	846540	Commercial Kitchen, Convection Oven, Double, Replace	10	7	3	1	EA	$8,643.00	$9,939.45	$9,939				$9,939										$9,939							**$19,879**
Clague Middle School	E10	846577	Commercial Kitchen, Garbage Disposal, 1 to 3 HP, Replace	15	12	3	1	EA	$3,434.22	$3,949.36	$3,949				$3,949															$3,949		**$7,899**
Clague Middle School	E10	846570	Commercial Kitchen, Convection Oven, Single, Replace	10	7	3	1	EA	$5,077.62	$5,839.26	$5,839				$5,839										$5,839							**$11,679**
Clague Middle School	E10	846653	Commercial Kitchen, Walk-In Freezer, Replace	20	17	3	1	EA	$22,317.14	$25,664.71	$25,665				$25,665																	**$25,665**
Clague Middle School	E10	846659	Commercial Kitchen, Food Warmer, Replace	15	12	3	1	EA	$1,551.91	$1,784.69	$1,785				$1,785															$1,785		**$3,569**
Clague Middle School	E10	846624	Commercial Kitchen, Walk-In Refrigerator, Replace	20	17	3	1	EA	$12,255.00	$14,093.25	$14,093				$14,093																	**$14,093**
Clague Middle School	E10	846604	Commercial Kitchen, Food Warmer, Replace	15	12	3	1	EA	$1,551.91	$1,784.69	$1,785				$1,785															$1,785		**$3,569**
Clague Middle School	E10	846569	Commercial Kitchen, Exhaust Hood, Replace	15	12	3	1	EA	$7,571.72	$8,707.48	$8,707				$8,707															$8,707		**$17,415**
Clague Middle School	E10	846632	Commercial Kitchen, Refrigerator, 2-Door Reach-In, Replace	15	12	3	1	EA	$4,256.00	$4,894.40	$4,894				$4,894															$4,894		**$9,789**
Clague Middle School	E10	846587	Commercial Kitchen, Food Warmer, Replace	15	12	3	1	EA	$1,551.91	$1,784.69	$1,785				$1,785															$1,785		**$3,569**
Clague Middle School	E10	846549	Residential Appliances, Refrigerator, 14-18 CF, Replace	15	12	3	6	EA	$956.04	$1,099.44	$6,597				$6,597															$6,597		**$13,193**
Clague Middle School	D30	846544	Residential Fixtures, Large Ceiling Fan, Replace	15	12	3	5	EA	$354.11	$761.34	$3,807				$3,807															$3,807		**$7,613**
Clague Middle School	D30	846585	Residential Fixtures, Ceiling Fan, Replace	15	12	3	11	EA	$354.11	$407.23	$4,479				$4,479															$4,479		**$8,959**
Clague Middle School	C10	846689	Residential Appliances, Range, Gas, Replace	15	12	3	2	EA	$768.11	$883.32	$1,767				$1,767															$1,767		**$3,533**
Clague Middle School	C10	846619	Bleacher, Fixed Seating, Replace	20	17	3	154	EA	$250.00	$287.50	$44,275				$44,275																	**$44,275**
Clague Middle School	C10	846684	Kitchen Cabinet, Base and Wall Section, Wood, Replace	20	11	9	16	LF	$467.63	$537.78	$8,604										$8,604											**$8,604**
Clague Middle School		958702	Davis Bacon Prevailing Wages, Surcharge for Prevailing Wages, 10% surcharge for prevailing wages	1	1	0	110096.18	LS	$1.00	$1.15	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	$126,611	**$2,532,212**
Clague Middle School	G2060	846633	Swimming Pool Plaster, , Refinish	15	14	1	500	SF	$5.60	$6.44	$3,220		$3,220															$3,220				**$6,440**
Clague Middle School	G2060	846930	Swimming Pool Filtration System, , Replace	15	12	3	1	EA	$6,733.29	$7,743.28	$7,743				$7,743															$7,743		**$15,487**
Clague Middle School	D20	846563	Swimming Pool Heater, Gas-Fired, 500 MBH, Replace	15	12	3	1	EA	$7,260.00	$8,349.00	$8,349				$8,349															$8,349		**$16,698**
Clague Middle School	G2060	846586	Swimming Pool Lifeguard Chair, , Replace	50	46	4	1	EA	$3,689.38	$4,242.79	$4,243					$4,243																**$4,243**
Clague Middle School	G2060	846923	Greenhouse Structure, Truss Frame, Plastic Walls & Roof, Replace	15	12	3	436	SF	$32.57	$37.46	$16,331				$16,331															$16,331		**$32,661**
Clague Middle School	G2030	846912	Roadways, Concrete Curb & Gutter, Repair	0	0	0	500	LF	$24.00	$27.59	$13,797	$13,797																				**$13,797**
Clague Middle School	G2020	847118	Parking Lots, Asphalt Pavement, Seal & Stripe	5	2	3	156000	SF	$0.38	$0.44	$68,082				$68,082					$68,082					$68,082					$68,082		**$272,329**
Clague Middle School	G2020	846938	Parking Lots, Asphalt Pavement, Mill & Overlay	25	21	4	150000	SF	$3.28	$3.77	$565,869					$565,869																**$565,869**
Clague Middle School	G2030	846916	Pedestrian Pavement, Sidewalk, Asphalt, Overlay	25	24	1	850	SF	$1.36	$1.56	$1,326		$1,326																			**$1,326**
Clague Middle School	G2030	846950	Pedestrian Pavement, Sidewalk, Clay Brick/Masonry Pavers, Replace	30	27	3	500	SF	$34.11	$39.23	$19,613				$19,613																	**$19,613**
Clague Middle School	G2030	846953	Pedestrian Pavement, Sidewalk, Concrete Large Areas, Replace	30	27	3	6000	SF	$9.00	$10.35	$62,100				$62,100																	**$62,100**
Clague Middle School	G2060	846919	Fences & Gates, Chain Link, 8' High, Replace	30	18	12	960	LF	$53.90	$61.99	$59,506													$59,506							**$59,506**
Clague Middle School	G2060	846937	Fences & Gates, Chain Link, 20' High, Replace	30	18	12	50	LF	$53.90	$115.89	$5,794													$5,794							**$5,794**
Clague Middle School	G2080	846933	Retaining Wall, Brick/Stone (per SF Face), Replace	40	28	12	265	SF	$130.61	$150.20	$39,804													$39,804							**$39,804**
Clague Middle School	G2060	846906	Signage, Property, Monument/Pylon, Replace	20	15	5	1	EA	$8,602.00	$9,892.30	$9,892						$9,892															**$9,892**
Clague Middle School	G2060	846929	Site Furnishings, Bike Rack, Replace	25	18	7	2	EA	$1,090.00	$1,253.50	$2,507								$2,507													**$2,507**
Clague Middle School	C10	846686	Sports Apparatus, Basketball Backstop, Replace	10	9	1	6	EA	$9,435.64	$10,850.98	$65,106		$65,106										$65,106									**$130,212**
Clague Middle School	G2060	847551	Play Surfaces & Sports Courts, Clay, Seal & Stripe	5	2	3	12471	SF	$0.38	$0.44	$5,457				$5,457					$5,457					$5,457					$5,457		**$21,828**
Clague Middle School	C10	846667	Sports Apparatus, Scoreboard, Replace	20	17	3	1	EA	$21,106.53	$24,272.50	$24,273				$24,273																	**$24,273**
Clague Middle School	G2060	846955	Sports Apparatus, Basketball Backstop, Replace	10	7	3	4	EA	$9,435.64	$10,850.98	$43,404				$43,404										$43,404							**$86,808**
Clague Middle School	G2060	847546	Play Surfaces & Sports Courts, Clay, Mill & Overlay	25	18	7	12471	SF	$3.28	$3.77	$47,041								$47,041													**$47,041**
Clague Middle School	G2060	846939	Sports Apparatus, Bleachers, Steel Frame w/ Aluminum Seats, Replace	25	18	7	15	EA	$197.00	$226.55	$3,398								$3,398													**$3,398**
Clague Middle School	G2060	846918	Flagpole, Metal, Replace	20	15	5	1	EA	$2,530.00	$2,909.50	$2,910						$2,910															**$2,910**
Clague Middle School	G2060	846936	Dumpster Accessories, Enclosures, Wood/Vinyl, 8' High, Replace	20	8	12	45	LF	$99.72	$114.68	$5,161													$5,161							**$5,161**
Clague Middle School	G4050	846904	Pole Light, Exterior, 80 to 100 W LED (Fixture & Bracket Arm Only), Replace	20	5	15	41	EA	$2,721.00	$3,129.15	$128,295																	$128,295				**$128,295**
Totals, Unescalated												**$1,969,040**	**$363,515**	**$1,360,161**	**$8,590,174**	**$5,064,359**	**$159,675**	**$138,983**	**$1,942,126**	**$204,835**	**$192,016**	**$131,755**	**$700,946**	**$329,204**	**$2,051,922**	**$149,572**	**$268,798**	**$221,325**	**$135,808**	**$995,318**	**$810,118**	**$25,779,648**
Totals, Escalated (3.0% inflation, compounded annually)												**$1,969,040**	**$374,421**	**$1,442,995**	**$9,386,715**	**$5,699,981**	**$185,107**	**$165,953**	**$2,388,570**	**$259,478**	**$250,537**	**$177,067**	**$970,273**	**$469,366**	**$3,013,317**	**$226,241**	**$418,779**	**$355,161**	**$224,470**	**$1,694,462**	**$1,420,546**	**$31,092,479**

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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:	2616 Nixon Road, Ann Arbor, Michigan 48105
Year Constructed/Renovated:	1972
Current Occupants:	Ann Arbor Public Schools
Percent Utilization:	100%
Management Point of Contact:	Mr. Jim Vibbart 734.320.3613 phone
Property Type:	Middle School
Site Area:	23.5 acres
Building Area:	156,000 SF
Number of Buildings:	1
Number of Stories:	2
Parking Type and Number of Spaces:	98 spaces in open lots
Building Construction:	Steel frame with concrete-topped metal decks.
Roof Construction:	Flat roofs with built-up membrane.
Exterior Finishes:	Brick Veneer
Heating, Ventilation and Air Conditioning:	Ductless split systems, exhaust fans, air handler units, condensing unit, boilers, ceiling fans, packaged unit, baseboard heaters, unit heaters.
Fire and Life/Safety:	Sprinkler heads, hydrants, strobes, extinguishers, pull stations, alarm panel, and exit signs.
ADA :	This building does not have any major ADA issues.
All 156,000 square feet of the building are occupied by a single occupant, Clague Middle School. The spaces are mostly offices, classrooms, supporting restrooms, library, gymnasium, swimming pool, kitchen/cafeteria, and mechanical and other utility spaces.	

Key Spaces Not Observed		
Room Number	Area	Access Issues
Green Storage Shed	Left elevation of building	Locked room and no key.
A “down unit” or area is a term used to describe a unit or space that cannot be occupied due to poor conditions such as fire damage, water damage, missing equipment, damaged floor, wall or ceiling surfaces, or other significant deficiencies. There are no down units or areas.		

Assessment Information	
Dates of Visit:	February 1, 2018 and February 2, 2018
On-Site Point of Contact (POC):	Jim Vibbart
Assessment and Report Prepared by:	Assessed by Tammy Prusa and Lawrence Sirridge, Report prepared by Tammy Prusa

Property Information	
Reviewed by:	Al Diefert Technical Report Reviewer For Andrew Hupp Program Manager ahupp@emgcorp.com 800.733.0660 x6632

1.2 Key Findings

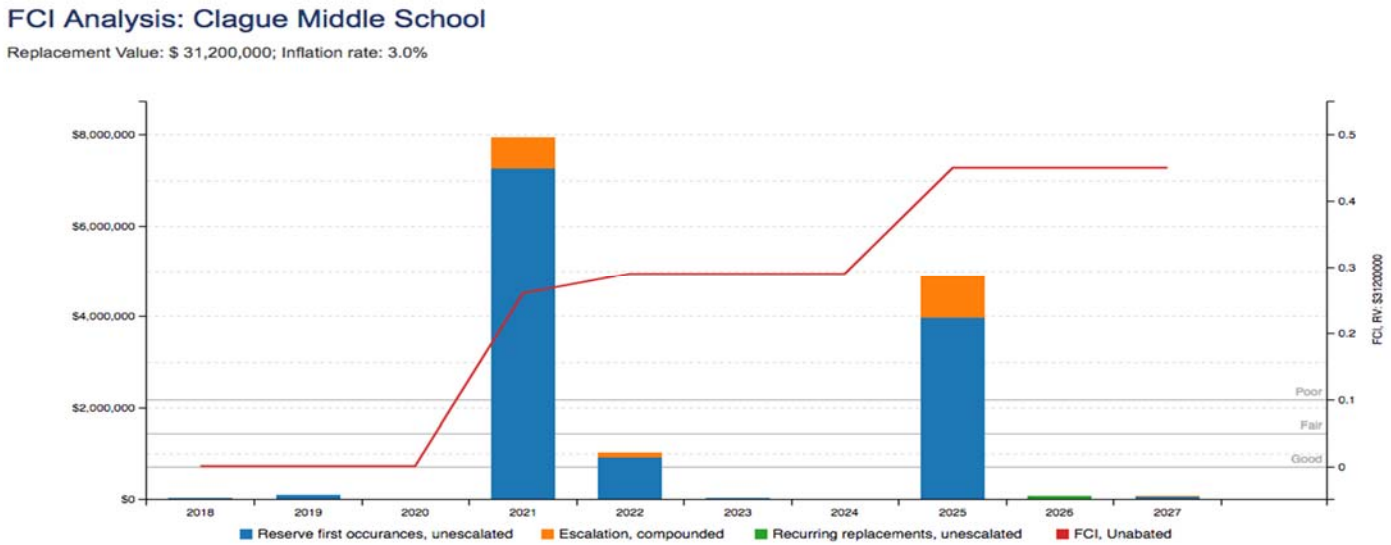
Site : The swimming pool area has mold located throughout the acoustic tiles ceiling, the tiles located throughout the swimming pool are either missing or have rust.

The swimming pool area is in poor condition. There is mold located throughout the acoustic tile ceiling, and tiles or either missing or damaged in the pool. A professional engineer must be retained to analyze the existing condition, provide recommendations and, if necessary, estimate the scope and cost of any required repairs. The cost of this study is included in the cost tables. A cost allowance to repair the acoustic tile ceiling and refinish the swimming pool is also included in the cost tables.

Architectural : The concrete interior stairs need to be repaired due to pieces missing throughout the stairwells. The exterior stairs need to be repaired due to cracking and rebar is corroding causing rust stains. The exterior walls of the building need to be repainted due to chipping and peeling throughout exterior walls. The basketball backstops located in the gymnasium need to be replaced due to the rims being bent. The concrete block located in room 225 needs to be repointed due to cracking throughout this area. The maple sports floor located in the gymnasium needs to be replaced as it has become wavy and unlevel. The acoustic tile located in the swimming pool area needs to be replaced as there was tiles missing throughout the ceiling. The interior ceiling located in room 225 needs to be repainted as it is chipped and peeling throughout this room. The convection oven located in the kitchen needs to be replaced due to the door not being able to be closed without using objects to keep it closed. The sidewalk on the left elevation of the building needs to be overlay as there were cracks observed during the site visit. There were isolated areas of the concrete curb that need to be repaired due to cracks observed during the site visit.

MEPF : The drinking fountains located in the swimming pool area need to be replaced as they do not work. The vast majority of the building is not protected by fire suppression; sprinkler heads are currently limited to the garage. 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. As part of the major planned, a facility-wide fire suppression retrofit is recommended.

1.3 Facility Condition Index (FCI)



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):	45.57%
10-Year FCI Rating	0.45
Current Replacement Value (CRV):	$31,200,000
Year 0 (Current Year) - Immediate Repairs (IR):	$42,112
Years 1-10 - Replacement Reserves (RR):	$14,176,944
Total Capital Needs:	$14,219,056

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	Good
Basement and Crawl Space	None	--

Anticipated Lifecycle Replacements

- No components of significance

Actions/Comments:

- The foundation systems are concealed. There are no significant signs of settlement, deflection, or movement.

B10 Superstructure

B1010 Floor Construction & B1020 Roof Construction		
Item	Description	Condition
Framing / Load-Bearing Walls	Steel columns and beams	Good
Ground Floor	Concrete slab	Good
Upper Floor Framing	Steel beams	Good
Upper Floor Decking	Metal decking with concrete topping	Good
Balcony Framing	None	--
Balcony Decking	None	--
Balcony Deck Toppings	None	--
Balcony Guardrails	None	--
Roof Framing	Steel beams or girders	Good
Roof Decking	Metal decking with concrete topping	Good

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Caulk minor cracking	☐	Monitor cracking for growth	☐
Other	☐	Other	☐

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

- The superstructure is concealed. Walls and floors appear to be plumb, level, and stable. There are no significant signs of deflection or movement.

B1080 Stairs					
Type	Description	Riser	Handrail	Balusters	Condition
Building Exterior Stairs	Concrete stairs	Closed	Metal	None	Poor
Building Interior Stairs	Concrete stairs	Closed	Metal	None	Poor

Anticipated Lifecycle Replacements:

- Interior concrete stairs
- Exterior concrete stairs

Actions/Comments:

- The concrete interior stairs have significant areas of chipped concrete located throughout the stairwells. The damaged portions of the stairs must be repaired. A cost allowance to repair the interior concrete stairs is included.
- The concrete exterior stairs have significant areas of cracking and rebar is corroding causing rust stains located on the rear elevation of the site. The damaged portions of the stairs must be repaired. A cost allowance to repair the exterior concrete stairs is included.

3 Building Envelope

B20 Exterior Vertical Enclosures

B2010 Exterior Walls		
Type	Location	Condition
Primary Finish	Brick veneer	Fair
Secondary Finish	Painted wood	Poor
Accented with	--	--
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	☐	Efflorescence	☐
Other	☐	Other	☐

Anticipated Lifecycle Replacements:

- Exterior paint
- Brick veneer repointing

Actions/Comments:

- The exterior finishes have significant areas of chipped and peeling paint. The exterior walls will require painting, a cost for this allowance is included.

B2020 Exterior Windows				
Window Framing	Glazing	Location	Window Screen	Condition
Aluminum framed storefront	Double glaze	Exterior walls	☐	Fair
Aluminum framed, operable	Double glaze	Exterior walls	☒	Fair

B2050 Exterior Doors		
Main Entrance Doors	Door Type	Condition
	Metal, insulated	Fair
Secondary Entrance Doors	Metal, insulated	Fair
Service Doors	--	--
Overhead Doors	Wood	Fair

Anticipated Lifecycle Replacements:

- Windows
- Storefront windows
- Exterior steel doors
- Exterior steel doors with safety glass
- Overhead 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.

B3010 Primary Roof			
Location	Roof	Finish	Single-ply membrane
Type / Geometry	Flat	Roof Age	12 Yrs
Flashing	Membrane	Warranties	None
Parapet Copings	None	Roof Drains	Internal drains
Fascia	None	Insulation	Rigid Board
Soffits	None	Skylights	No
Attics	Steel beams	Ventilation Source-1	--
Roof Condition	Fair	Ventilation Source-2	--

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Drainage components broken/missing	☐	Vegetation/fungal growth	☐
Blocked Drains	☐	Debris	☐
Other	☐	Other	☐

Degradation Issues			
Observation	Exists at Site	Observation	Exists at Site
Evidence of roof leaks	☐	Significant ponding	☐
Excessive patching or repairs	☐	Blistering or ridging	☐
Other	☐	Other	☐

Anticipated Lifecycle Replacements:

- Single-ply EPDM roof membrane

Actions/Comments:

- The roof finishes appear to be more than ten 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.
- The attics are not accessible and it could not be determined if there is moisture, water intrusion, or excessive daylight in the attics.

4 Interiors

C10 Interior Construction

C1030 Interior Doors		
Item	Type	Condition
Interior Doors	Hollow core wood	Fair
Door Framing	Wood	Fair
Fire Doors	No	Fair
Closet Doors	Hollow core	Fair

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Improperly adjusted door closures	☐	Damaged/loose door hardware	☐
Other	☐	Other	☐

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 - CLAGUE MIDDLE SCHOOL

Location /Space	Finish		Quantity (SF)	Condition	Action	RUL	Est. Cost
Gymnasium	Floor	Maple Sports Floor	1000	Poor	Replace	1	10,252
Gymnasium	Ceiling	Suspended Acoustical Tile (ACT)	23400	Fair	Replace	3	72,797
Kitchen	Floor	Quarry Tile	500	Fair	Replace	4	7,594
Office	Floor	Carpet Tile Commercial-Grade	46800	Fair	Replace	3	325,864
Restrooms	Floor	Ceramic Tile	23400	Fair	Replace	4	368,667
Restrooms	Wall	Ceramic Tile	46800	Fair	Replace	3	774,727
Room 225	Wall	Concrete Block	1000	Poor	Repoint	1	7,150
Room 225	Ceiling	Exposed/Generic	1000	Poor	Prep & Paint	1	2,270
Stage	Floor	Wood Strip	1000	Fair	Refinish	3	3,678
Swimming pool	Ceiling	Suspended Acoustical Tile (ACT)	1000	Poor	Repair	0	3,102
Throughout building	Wall	Gypsum Board/Plaster/Metal	93600	Fair	Prep & Paint	3	133,212
Throughout building	Ceiling	Gypsum Board/Plaster	54600	Fair	Prep & Paint	3	105,738
Throughout building	Wall	Acoustical Tile (ACT)	46800	Fair	Replace	3	354,267
Throughout building	Ceiling	Suspended Acoustical Tile (ACT)	78000	Fair	Replace	3	242,658
Throughout building	Wall	Concrete/Masonry	124800	Fair	Prep & Paint	3	181,085
Throughout building	Floor	Vinyl Tile (VCT)	85800	Fair	Replace	3	411,891

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Loose carpeting/flooring	☐	Minor areas of stained ceiling tiles	☒
Minor paint touch-up	☒	Areas of damaged/missing baseboard	☐
Other	☐	Other	☐

Anticipated Lifecycle Replacements:

- Refinish wood strip
- Interior paint
- Repoint concrete block
- Acoustic tile
- Maple sports floor
- Toilet partitions
- Ceramic tile floor
- Lockers
- Ceramic tile wall
- Quarry tile
- Carpet tile
- Kitchen cabinets
- Tectrum
- Moveable partitions
- Vinyl tile
- Basketball backstop
- Bleachers
- Scoreboard
- Repair acoustic tile
- Range
- Clocks

Actions/Comments:

- It appears that the interior finishes have not been renovated within the last 15 years.
- There are cracked concrete blocks in room 225 (upper gym). The damaged finishes must be repointed. A cost allowance to repoint the concrete block is included.
- There are dips throughout the lower gym maple sports floor. The damaged finishes must be replaced. A cost allowance to replace the maple sports floor is included.
- The rims to the basketball backstops are bent in the lower gym. The damaged basketball backstops must be replaced. A cost allowance to replace the basketball backstops is included.
- There are chipped and peeling paint in room 225 (upper gym). The chipped and peeling finishes must be repainted. A cost allowance to paint room 225 is included.
- The ceiling tiles have isolated areas of water-damaged ceiling tiles throughout the swimming pool area. The damaged ceiling tiles need to be repaired. A cost allowance to repair the acoustic tiles in the swimming pool area is included.

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

D1030 Vertical Conveying (Building Elevators) – Building 1			
Manufacturer	Detroit	Machinery Location	Ground floor or basement adjacent to shaft
Safety Stops	Mechanical	Emergency Communication Equipment	Yes
Cab Floor Finish	Vinyl-tiled	Cab Wall Finish	Stainless steel
Cab Finish Condition	Fair	Elevator Cabin Lighting	F42T8
Hydraulic Elevators	1 car at 1500 LB		
Overhead Traction Elevators	None		
Freight Elevators	None		
Machinery Condition	Fair	Controls Condition	Fair
Other Conveyances	None	Other Conveyance Condition	Fair

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Inspection certificate not available	☐	Inspection certificate expired	☐
Service call needed	☐	Minor cab finish repairs	☐
Other	☐	Other	☐

Anticipated Lifecycle Replacements:

- Elevator controls
- Hydraulic machinery

Actions/Comments:

- The elevators are serviced by outside contractors on a routine basis. The elevator machinery and controls are the originally installed system.
- The elevators appear to provide adequate service. The elevators are serviced by outside contractors on a routine basis. The elevator machinery and controls are the originally installed system. The elevators will require continued periodic maintenance. Full modernization is recommended. A budgetary cost for this work is included.
- The elevators are inspected on an annual basis by the municipality. It is common for inspections to occur behind schedule. A new inspection should be scheduled as soon as possible.
- The emergency communication equipment in the elevator cabs appears to be functional. Equipment testing is not within the scope of the work.
- The finishes in the elevator cabs will require replacement. The cost to replace the finishes is relatively insignificant and the work can be performed as part of the property management's operations program.

D20 Plumbing

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

Domestic Water Heaters or Boilers	
Components	Boiler
Fuel	Natural gas
Boiler or Water Heater Condition	Fair
Supplementary Storage Tanks?	Yes
Adequacy of Hot Water	Inadequate
Adequacy of Water Pressure	Adequate

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

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Hot water temperature too hot or cold	☒	Minor or isolated leaks	☐
Other	☐	Other	☐

Plumbing Systems - CLAGUE MIDDLE SCHOOL

Location	Component	Component Description	Quantity	Unit	Condition	Action	RUL	Est. Cost
Boiler room	Water Storage Tank	151 to 250 GAL	1	EA	Fair	Replace	3	2,778
Boiler room	Gas Distribution System	5 HP	1	EA	Fair	Replace	3	9,652
Boiler room	Water Heater	Gas, 501 to 800 MBH	1	EA	Fair	Replace	4	34,559
Boiler room	Water Softener	10 GAL	1	EA	Fair	Replace	3	2,828
Custodian closet	Service Sink	Floor	5	EA	Fair	Replace	17	7,998
Garage	Backflow Preventer	4"	1	EA	Fair	Replace	3	6,001
Hallways	Drinking Fountain	Refrigerated	18	EA	Fair	Replace	3	22,635
Harris - 144	Gang Sink	Stainless Steel	1	EA	Fair	Replace	3	2,108
Kitchen	Service Sink	Porcelain Enamel, Cast Iron	1	EA	Fair	Replace	3	1,360
Kitchen	Sink	Pot, Multi-compartment	10	LF	Fair	Replace	12	12,625
Kitchen	Sink	Vitreous China	1	EA	Fair	Replace	3	862
Kitchen	Water Heater	Electric, Commercial, 30 to 80 GAL	1	EA	Fair	Replace	5	6,963
Pool area	Drinking Fountain	Vitreous China	4	EA	Failed	Replace	0	7,756
Pool room	Domestic Circulator or Booster Pump	5 to 7.5 HP	1	EA	Fair	Replace	3	11,641
Pool Room	Domestic Circulator or Booster Pump	5 to 7.5 HP	1	EA	Fair	Replace	3	11,641
Restrooms	Urinal	Vitreous China	11	EA	Fair	Replace	3	13,128
Restrooms	Lavatory	Vitreous China	36	EA	Fair	Replace	3	20,616
Restrooms	Toilet	Tankless (Water Closet)	29	EA	Fair	Replace	3	24,446
Science rooms	Emergency Eye Wash	Emergency Eye Wash	8	EA	Fair	Replace	3	11,336
Throughout building	Sink	Stainless Steel	25	EA	Fair	Replace	3	26,351

Anticipated Lifecycle Replacements:

- Sinks
- Emergency eye wash
- Water heaters
- Distribution pumps
- Swimming pool heater
- Backflow preventer
- Boiler
- Drinking fountains
- Urinals
- Toilets
- Water storage tank
- Water softener
- Lavatories
- Showers

Actions/Comments:

- Per staff members at the school the domestic boilers appears to be inadequate to meet demand. Inadequate hot water was reported. When the domestic boilers is replaced, consideration should be given to ordering and providing a higher-capacity unit.

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	Entire building

Building Central Cooling System	
Primary Cooling System Type	Air handling units
Refrigerant	R-22
Cooling Towers	None
Location of Major Equipment	Mechanical rooms
Space Served by System	Entire building

Distribution System	
HVAC Water Distribution System	Two-pipe
Air Distribution System	Constant
Location of Air Handlers	Mechanical rooms
Terminal Units	Suspended unit heaters
Quantity and Capacity of Terminal Units	1 at 10 MBH
Location of Terminal Units	Along ceilings

Packaged, Split & Individual Units	
Primary Components	Electric baseboards
Cooling (if separate from above)	Through-wall air conditioners
Heating Fuel	Natural gas
Location of Equipment	Throughout interior spaces
Space Served by System	Entire building

Supplemental/Secondary Components	
Supplemental Component #1	Ductless mini-split systems
Location / Space Served by ductless split systems	Throughout building
Ductless split systems Condition	Fair
Supplemental Component #2	Split system heat pumps
Location / Space Served by split system heat pump	Kitchen/Cafeteria
Split system heat pump Condition	Fair
Supplemental Component #3	Package units
Location / Space Served by package unit	N/A
Package unit Condition	Fair

Controls and Ventilation	
HVAC Control System	BAS, pneumatic controls
HVAC Control System Condition	Fair
Building Ventilation	Roof top exhaust fans
Ventilation System Condition	Fair

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Ductwork/grills need cleaned	☐	Minor control adjustments needed	☐
Leaking condensate lines	☐	Poor mechanical area access	☐
Other	☐	Other	☐

Degradation Issues			
Observation	Exists at Site	Observation	Exists at Site
Heating, Cooling or Ventilation is not adequate	☒	Major system inefficiencies	☐
HVAC controls pneumatic or antiquated	☐	Obsolete refrigerants : R11, R12, R22, R123, R502	☐
Other	☐	Other	☐

Mechanical Systems - CLAGUE MIDDLE SCHOOL

Location	Component	Component Description	Quantity	Unit	Condition	Action	RUL	Est. Cost
Boiler room	Boiler	Gas, 4,201 to 10,000 MBH	1	EA	Fair	Replace	7	332,867
Boiler room	Circulation Pump	Distribution Pump, Heating Water, 5 HP	1	EA	Fair	Replace	3	5,519
Boiler room	Circulation Pump	Distribution Pump, Heating Water, 3 HP	1	EA	Fair	Replace	3	4,652
Boiler room	Chemical Feed System	Chemical Feed System	1	EA	Fair	Replace	7	10,642
Boiler room	Circulation Pump	Distribution Pump, Heating Water, 5 HP	1	EA	Fair	Replace	3	5,519
Boiler room	Circulation Pump	Distribution Pump, Heating Water, 3 HP	1	EA	Fair	Replace	2	4,652
Boiler room	Circulation Pump	Distribution Pump, Heating Water, 5 HP	1	EA	Fair	Replace	3	5,519
Boiler room	Boiler	Gas, 4,201 to 10,000 MBH	1	EA	Fair	Replace	7	332,867
Building exterior	Ductless Split System	Single Zone, 2.5 to 3 Ton	1	EA	Fair	Replace	9	6,577
Building exterior	Ductless Split System	Single Zone, 1.5 to 2 Ton	1	EA	Fair	Replace	10	4,473
Building exterior	Ductless Split System	Single Zone, 2.5 to 3 Ton	1	EA	Fair	Replace	9	6,577
Building exterior	Ductless Split System	Single Zone, 2.5 to 3 Ton	1	EA	Fair	Replace	9	6,577
Classrooms	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	3	2,664
Electrical Room	Air Handler	Interior, 6,501 to 8,000 CFM	1	EA	Fair	Replace	19	26,017
Electrical Room	Circulation Pump	Distribution Pump, Heating Water, 5 HP	1	EA	Fair	Replace	3	5,519
Hallway	Baseboard Heater	Electric, 6', 1500 Watts	50	EA	Fair	Replace	7	11,979
Harris - 144	Unit Heater	Natural Gas, 5 to 10 MBH	1	EA	Fair	Replace	3	3,767
Library	Ductless Split System	Single Zone, 2.5 to 3 Ton	1	EA	Fair	Replace	9	6,577
Library	Ductless Split System	Single Zone, 2.5 to 3 Ton	1	EA	Fair	Replace	9	6,577
Mechanical room	Air Handler	Interior, 10,001 to 15,000 CFM	1	EA	Fair	Replace	19	41,979
Mechanical room	Air Handler	Interior, 15,001 to 20,000 CFM	1	EA	Fair	Replace	3	54,822
Mechanical room	Building Automation System	HVAC Controls	156000	SF	Fair	Upgrade	3	836,550
Mechanical room	Air Handler	Interior, 8,001 to 10,000 CFM	1	EA	Fair	Replace	19	31,182
Mechanical room	Exhaust Fan	Centrifugal, 10,001 to 16,000 CFM	1	EA	Fair	Replace	3	10,167
Mechanical room	Circulation Pump	Distribution Pump, Heating Water, 5 HP	1	EA	Fair	Replace	3	5,519
Mechanical room	Air Handler	Interior, 10,001 to 15,000 CFM	1	EA	Fair	Replace	19	41,979
Mechanical room	Exhaust Fan	Centrifugal, 10,001 to 16,000 CFM	1	EA	Fair	Replace	3	10,167
Mechanical room	Air Handler	Interior, 401 to 800 CFM	1	EA	Fair	Replace	9	3,352
Mechanical room	Air Handler	Interior, 10,001 to 15,000 CFM	1	EA	Fair	Replace	13	41,979
Music room	Ductless Split System	Single Zone, 2.5 to 3 Ton	1	EA	Fair	Replace	9	6,577
Music room	Ductless Split System	Single Zone, 2.5 to 3 Ton	1	EA	Fair	Replace	9	6,577
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM	1	EA	Fair	Replace	3	2,664
Roof	Exhaust Fan	Centrifugal, 2,001 to 3,500 CFM	1	EA	Fair	Replace	3	3,073
Roof	Split System	Condensing Unit/Heat Pump, 3 Ton	1	EA	Fair	Replace	4	3,579
Roof	Exhaust Fan	Centrifugal, 8,001 to 10,000 CFM	1	EA	Fair	Replace	6	7,686
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM	1	EA	Fair	Replace	5	2,664
Roof	Exhaust Fan	Centrifugal, 5,001 to 8,000 CFM	1	EA	Fair	Replace	3	5,570
Roof	Exhaust Fan	Centrifugal, 2,001 to 3,500 CFM	1	EA	Fair	Replace	3	3,073
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	3	2,664
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	3	2,664
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	3	2,664
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	5	2,664
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	3	2,664
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	3	2,664
Roof	Condenser	Air-Cooled, 1 Ton	1	EA	Good	Replace	11	2,310
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	5	2,664
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	8	2,664
Roof	Exhaust Fan	Centrifugal, 2,001 to 3,500 CFM	1	EA	Fair	Replace	6	3,073
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	5	2,664
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	3	2,664
Roof	Packaged Unit (RTU)	3 Ton	1	EA	Fair	Replace	3	9,872
Roof	Exhaust Fan	Centrifugal, 8,001 to 10,000 CFM	1	EA	Fair	Replace	3	7,686
Roof	Exhaust Fan	Centrifugal, 801 to 2,000 CFM,	1	EA	Fair	Replace	3	2,664
Roof	Exhaust Fan	Roof Mounted, 1,001 to 1,500 CFM	1	EA	Fair	Replace	4	1,928
Roof	Exhaust Fan	Roof Mounted, 2,001 to 5,000 CFM	1	EA	Fair	Replace	4	2,763
Roof	Exhaust Fan	Roof Mounted, 2,001 to 5,000 CFM	1	EA	Fair	Replace	4	2,763
Roof	Exhaust Fan	Roof Mounted, 1,001 to 1,500 CFM	1	EA	Fair	Replace	4	1,928
Roof	Exhaust Fan	Roof Mounted, 1,001 to 1,500 CFM	1	EA	Fair	Replace	4	1,928
Roof	Package Unit	RTU, 5 Ton,	1	EA	Fair	Replace	3	11,239
Roof	Exhaust Fan	Roof Mounted, 801 to 1,000 CFM	1	EA	Fair	Replace	3	1,769
Roof	Exhaust Fan	Roof Mounted, 801 to 1,000 CFM	1	EA	Fair	Replace	3	1,769
Roof	Exhaust Fan	Roof Mounted, 801 to 1,000 CFM	1	EA	Fair	Replace	3	1,769

Anticipated Lifecycle Replacements:

- Chemical feed system
- Exhaust fans
- Air condenser
- Ceiling fans
- Air compressor
- Air handler units
- Dust collector
- Ductless split systems
- Baseboard heaters
- Packaged units
- Building Automation System
- Boilers
- Unit heater
- Condensing unit

Actions/Comments:

- The HVAC systems are maintained by the in-house maintenance staff. Records of the installation, maintenance, upgrades, and replacement of the HVAC equipment at the property have been maintained since the property was first occupied.
- The HVAC equipment varies in age. HVAC equipment is replaced on an "as needed" basis.
- The HVAC equipment appears to be functioning adequately overall. The maintenance staff and property management staff were interviewed about the historical and recent performance of the equipment and systems. Per the POC the cooling systems that are available to the building are inaquadate and would like package units (RTU) installed to replace the current point of used systems. A cost allowance for this is not included. However, due to the inevitable failure of parts and components over time, some of the equipment will require replacement. A budgetary cost for this work is included.

D40 Fire Protection

Item	Description					
Type	None					
Sprinkler System	None	☐	Standpipes	☐	Backflow Preventer	☐
	Hose Cabinets	☐	Fire Pumps	☐	Siamese Connections	☐
Sprinkler System Condition	--					
Fire Extinguishers	Last Service Date		Servicing Current?			
	July 2017		Yes			
Hydrant Location	Adjacent street					
Siamese Location	--					
Special Systems	Kitchen Suppression System	☐	Computer Room Suppression System	☐		

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Extinguisher tag expired	☐	Riser tag expired (5 year)	☐
Other	☐	Other	☐

Anticipated Lifecycle Replacements:

- Fire alarm system
- Defibrillator
- Exit lights
- Sprinkler heads
- Installation of sprinkler system
- Fire extinguishers

Actions/Comments:

- The vast majority of the building is not protected by fire suppression; sprinkler heads are currently limited to the garage. 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. As part of the major recommended short term renovations, a facility-wide fire suppression retrofit is recommended. A budgetary cost is included.

D50 Electrical

Distribution & Lighting			
Electrical Lines	Underground	Transformer	Pad-mounted
Main Service Size	2000 Amps	Volts	120/208 Volt, three-phase
Meter and Panel Location	Mechanical Room	Branch Wiring	Copper
Conduit	Metallic	Step-Down Transformers?	Yes
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	☐	Unsecured high voltage area	☐
Loose cables or impoper use of conduit	☐	Poor electrical room ventilation	☐

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Other	☐	Other	☐

Anticipated Lifecycle Replacements:

- Distribution panels
- Switchboard
- Transformers
- Lighting system
- Variable frequency drive

Actions/Comments:

- The onsite electrical systems up to the meters are owned and maintained by the respective utility company.
- The vast majority of electrical components within the building, including the circuit breaker panels, switchboards, step-down transformers, and wiring, are original to the 1972 construction. The electrical system appears to be undersized. The electric systems is overloaded throughout the first floor office area. A full modernization project is recommended to upgrade the aging interior electrical infrastructure.

D60 Communications

D6060 Public Address Systems						
Item	Description					
Communication Equipment	Public Address System	☐	Nurse Call System	☐	Clock	☒

D70 Electronic Safety and Security

D7010 Access Control and Intrusion Detection / D7050 Detection and Alarm						
Item	Description					
Access Control and Intrusion Detection	Exterior Camera	☐	Interior Camera	☒	Front Door Camera Only	☐
	Cameras monitored	☐	Security Personnel On-Site	☐	Intercom/Door Buzzer	☒
Fire Alarm System	Central Alarm Panel	☒	Battery-Operated Smoke Detectors	☐	Alarm Horns	☐
	Annunciator Panels	☐	Hard-Wired Smoke Detectors	☐	Strobe Light Alarms	☒
	Pull Stations	☒	Emergency Battery-Pack Lighting	☒	Illuminated EXIT Signs	☐
Fire Alarm System Condition	Fair					

D7010 Access Control and Intrusion Detection / D7050 Detection and Alarm		
Item	Description	
Central Alarm Panel System	Location of Alarm Panel	Installation Date of Alarm Panel
	Front entrance of office	2006

Anticipated Lifecycle Replacements:

- Security/surveillance system
- Intercomms
- Fire alarm control panel

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 kitchen includes the following major appliances, fixtures, and equipment:

E1030 Commercial Kitchen Equipment		
Appliance	Comment	Condition
Refrigerators	Walk-in, Up-right, Under-counter	Fair
Freezers	Walk-in	Fair
Ranges	☐	--
Ovens	Electric	Fair
Griddles / Grills	☐	--
Fryers	☐	--
Hood	Exhaust ducted to exterior	Fair
Dishwasher	Owned	Fair
Microwave	☐	--
Ice Machines	☐	--
Steam Tables	☐	--
Work Tables	☐	--
Shelving	☐	--

E1030 Commercial Laundry		
Equipment	Comment	Condition
Commercial Washing Machines	☐	--
Commercial Dryers	☐	--
Residential Washers	☐	--
Residential Dryers	☐	--

Anticipated Lifecycle Replacements:

- Residential Refrigerator
- Salad table
- 2-door reach-in refrigerators
- Food warmers
- Convection ovens
- Garbage disposal
- Walk-in freezer

- Walk-in cooler
- Exhaust hood

Actions/Comments:

- The convection oven does not close on its own, the kitchen staff has to use objects to keep the door closed on the convection oven. The convection oven requires replacement.

7 Sitework

G20 Site Improvements

G2020 Parking Lots & 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, asphalt, and brick pavers.	Fair
Curbs	Concrete	Poor
Pedestrian Ramps	None	--
Ground Floor Patio or Terrace	None	--

Parking Count				
Open Lot	Carport	Private Garage	Subterranean Garage	Freestanding Parking Structure
98	--	--	--	--
Total Number of ADA Compliant Spaces			4	
Number of ADA Compliant Spaces for Vans			1	
Total Parking Spaces			98	

Site Stairs			
Location	Material	Handrails	Condition
Rear elevation of building	Concrete stairs	Metal	Poor

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Pavement oil stains	☐	Vegetation growth in joints	☐
Stair/ramp rails loose	☐	Stair/ramp rail needs scraped and painted	☐
Other	☐	Other	☐

Degradation Issues			
Observation	Exists at Site	Observation	Exists at Site
Potholes/depressions	☐	Alligator cracking	☒
Concrete spalling	☐	Trip hazards (settlement/heaving)	☐
Other	☐	Other	☐

Anticipated Lifecycle Replacements:

- Mill and overlay parking lot
- Seal and stripe parking lot
- Brick/masonry pavers
- Overlay sidewalk
- Concrete sidewalk

Actions/Comments:

- The concrete curbs and asphalt sidewalks have isolated areas of cracking and spalling. These areas occur on the left elevation of the building. The damaged areas of concrete curbs and asphalt sidewalks will need to be repaired. A cost allowance for these items is included.

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

Site Fencing		
Type	Location	Condition
Chain link with metal posts	Tennis court	Fair
Chain link with metal posts	Baseball field	Fair
Stained wood board and posts	Surrounding dumpsters	Fair

Refuse Disposal				
Refuse Disposal	Common area dumpsters			
Dumpster Locations	Mounting	Enclosure	Contracted?	Condition
Left elevation of building	Concrete pad	Wood board fence	Yes	Fair

Other Site Amenities			
	Description	Location	Condition
Playground Equipment	None	--	--
Tennis Courts	Clay	Left elevation of building	Fair
Basketball Court	Clay	Left elevation of building	Fair
Swimming Pool	Yes	Interior of right elevation of building	Poor

The tennis courts and basketball courts are surrounded by a chain link fence. High-intensity light fixtures, mounted on metal poles, are provided for night-time court use.

Anticipated Lifecycle Replacements:

- Dumpster enclosure
- Swimming pool filtration
- Domestic pool pumps
- Signage
- Swimming pool plaster
- Bike rack
- Site fencing
- Swimming pool lifeguard chair
- Flagpole
- Greenhouse
- Basketball backstop
- Play surfaces
- Bleachers

Actions/Comments:

- The swimming pool has numerous amounts of rust in the pool lining and ceramic tiles cracked or missing throughout. The pool requires relining to preserve integrity and prevent potential injuries. A cost allowance for this item is included.

G2080 Landscaping		
Drainage System and Erosion Control		
System	Exists at Site	Condition
Surface Flow	☐	--
Inlets	☐	--
Swales	☐	--
Detention pond	☐	--
Lagoons	☐	--
Ponds	☐	--
Underground Piping	☒	Fair
Pits	☐	--
Municipal System	☒	Fair
Dry Well	☐	--

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	Generally flat.						
Landscaping	Trees	Grass	Flower Beds	Planters	Drought Tolerant Plants	Decorative Stone	None
	☒	☒	☒	☐	☐	☐	☐
Landscaping Condition	Fair						
Irrigation	Automatic Underground	Drip	Hand Watering	None			
	☐	☐	☐	☒			
Irrigation Condition	--						

Retaining Walls		
Type	Location	Condition
Keystone	Courtyard	Fair

Anticipated Lifecycle Replacements:

- Stone retaining walls

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 meters and regulators are located along the exterior walls of the buildings. 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 meters and regulators 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
	☐	☒	☐	☐	☐
	Fair				
Building Lighting	None		Wall Mounted		Recessed Soffit
	☐		☒		☐
	Fair				

Maintenance Issues			
Observation	Exists at Site	Observation	Exists at Site
Isolated bulb/lamp replacement	☐	Discolored/dirty lens cover	☐
Other	☐	Other	☐

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

Other Ancillary Structures			
Type	Storage Shed	Location	Left elevation of building
Item	Material	Item	Material
Exterior Siding	CMU	Roof Finishes	Asphalt Singles
Interior Finishes	N/A	MEPF	N/A
Overall Building Condition			Fair

Anticipated Lifecycle Replacements:

- Exterior paint
- Exterior steel door
- Overhead door
- Repoint CMU
- Asphalt shingles

Actions/Comments:

- The storage shed is missing asphalt shingles on the roof. The storage shed asphalt shingles requires replacement.

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.

At a school property, the areas considered as a public accommodation besides the site itself and parking, are the exterior accessible route, the interior accessible route up to the tenant lease lines and the interior common areas, including the common area restrooms.

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	☐	☐	☐
Exterior Accessible Route	☐	☐	☐
Interior Accessible Route	☐	☐	☒
Restrooms	☐	☐	☐
Elevators	☐	☐	☐

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

Corrections of these conditions should be addressed from a liability standpoint, but are not necessarily code violations. The Americans with Disabilities Act Accessibility Guidelines concern civil rights issues as they pertain to the disabled and are not a construction code, although many local jurisdictions have adopted the Guidelines as such.

11.2 Flood Zone and Seismic Zone

According to the Flood Insurance Rate Map, published by the Federal Emergency Management Agency (FEMA) and dated April 8, 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 Zone

1, defined as an area of 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 Clague Middle School, 2616 Nixon Road, Ann Arbor, MI 48105, 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 the client for the purpose stated within Section 1 of this report. The report, or any excerpt thereof, shall not be used by any party other than the client or for any other purpose than that specifically stated in our agreement or within Section 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: Tammy Prusa,
Project Manager

Reviewed by:

Al Diefert
Technical Report Reviewer
For
Andrew Hupp
Program Manager

13 Appendices

Appendix A: Photographic Record

Appendix B: Site and Floor Plans

Appendix C: Supporting Documentation

Appendix D: Pre-Survey Questionnaire

Appendix A:
Photographic Record

#1:	FRONT ELEVATION

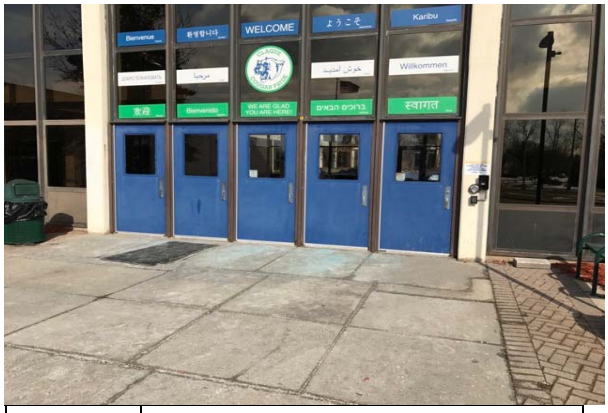
#2:	LEFT ELEVATION

#3:	REAR ELEVATION

#4:	RIGHT ELEVATION

#5:	STORAGE SHED

#6:	EXTERIOR WALL



#7:	EXTERIOR DOORS

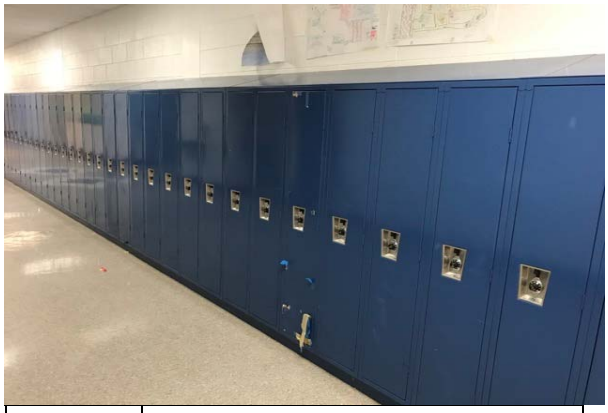
#8:	WINDOWS

#9:	ROOF

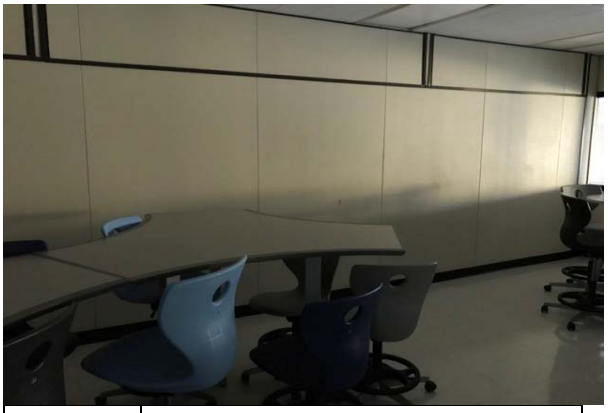
#10:	EXTERIOR WALL

#11:	INTERIOR DOOR

#12:	KITCHEN CABINETS

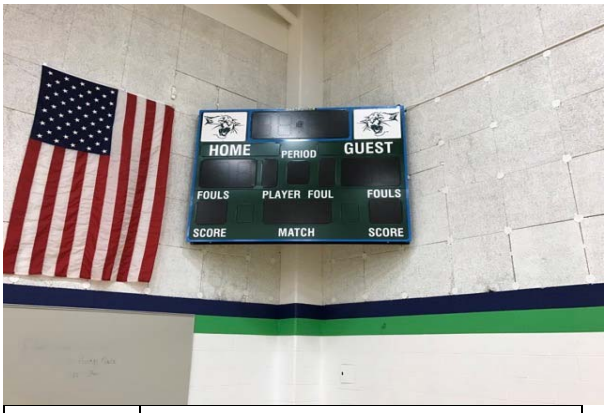


#13:	LOCKERS



#14:	MOVABLE PARTITIONS

#15:	TOILET PARTITIONS



#16:	SPORTS APPARATUS, SCOREBOARD

#17:	TIME CONTROL CLOCK

#18:	SPORTS APPARATUS, BASKETBALL BACKSTOP

#19:	ELEVATOR

#20:	TOILET, TANKLESS (WATER CLOSET)

#21:	SWIMMING POOL HEATER, GAS-FIRED

#22:	DRINKING FOUNTAIN

#23:	WATER HEATER, ELECTRIC

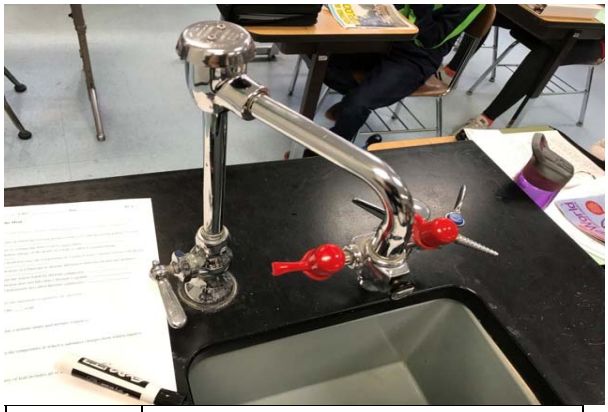
#24:	DISTRIBUTION PUMP

#25:	WATER STORAGE TANK

#26:	SINK, MULTI-COMPARTMENT

#27:	WATER SOFTENER

#28:	BACKFLOW PREVENTER



#29:	EMERGENCY EYE WASH

#30:	LAVATORY, VITREOUS CHINA

#31:	EXHAUST FAN

#32:	CEILING FAN

#33:	BOILER, GAS

#34:	CHEMICAL FEED SYSTEM

#35:	DUST COLLECTOR

#36:	AIR HANDLER

#37:	BUILDING AUTOMATION SYSTEM (HVAC CONTROLS)

#38:	DUCTLESS SPLIT SYSTEM

#39:	FIRE EXTINGUISHER

#40:	FIRE ALARM DEVICE

#41:	INTERCOM SPEAKER

#42:	DEFIBRILLATOR, CABINET MOUNTED

#43:	EXIT LIGHTING FIXTURE

#44:	SPRINKLER HEADS

#45:	VARIABLE FREQUENCY DRIVE (VFD)

#46:	LIGHTING SYSTEM

#47:	SWITCHBOARD

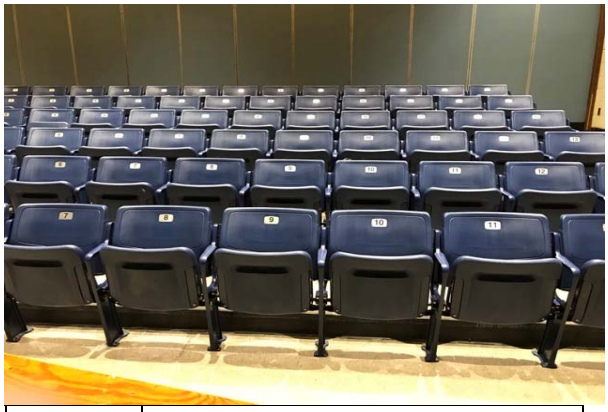
#48:	DISTRIBUTION PANEL

#49:	FIRE ALARM CONTROL PANEL, ADDRESSABLE

#50:	SECURITY/SURVEILLANCE SYSTEM

#51:	COMMERCIAL KITCHEN, WALK-IN REFRIGERATOR

#52:	COMMERCIAL KITCHEN, EXHAUST HOOD



#53:	AUDITORIUM SEATS

#54:	COMMERCIAL KITCHEN, GARBAGE DISPOSAL

#55:	COMMERCIAL KITCHEN, CONVECTION OVEN, DOUBLE

#56:	COMMERCIAL KITCHEN, REFRIGERATOR

#57:	PARKING LOTS, ASPHALT PAVEMENT

#58:	PEDESTRIAN PAVEMENT, SIDEWALK, CLAY BRICK/MASONRY PAVERS

#59:	FENCES ANDGATES, CHAIN LINK

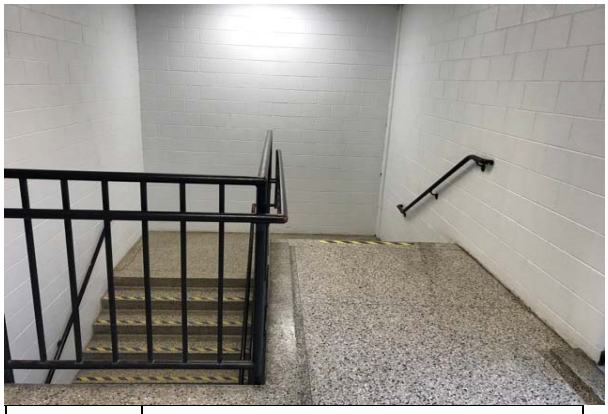
#60:	SWIMMING POOL PLASTER

#61:	GREENHOUSE

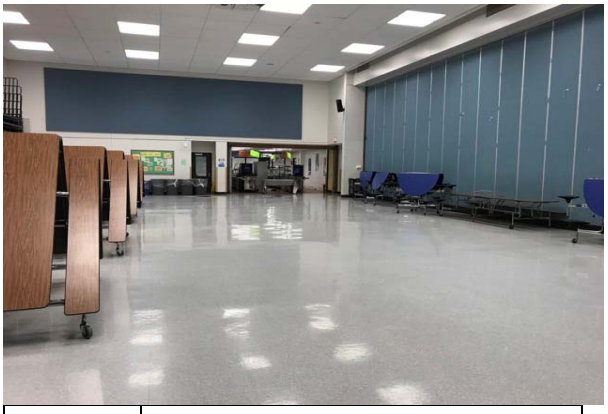
#62:	EXTERIOR POLE LIGHT

#63:	KITCHEN

#64:	RESTROOM



#65:	STAIRWELL



#66:	CAFETERIA

#67:	TENNIS COURT

#68:	HALLWAY

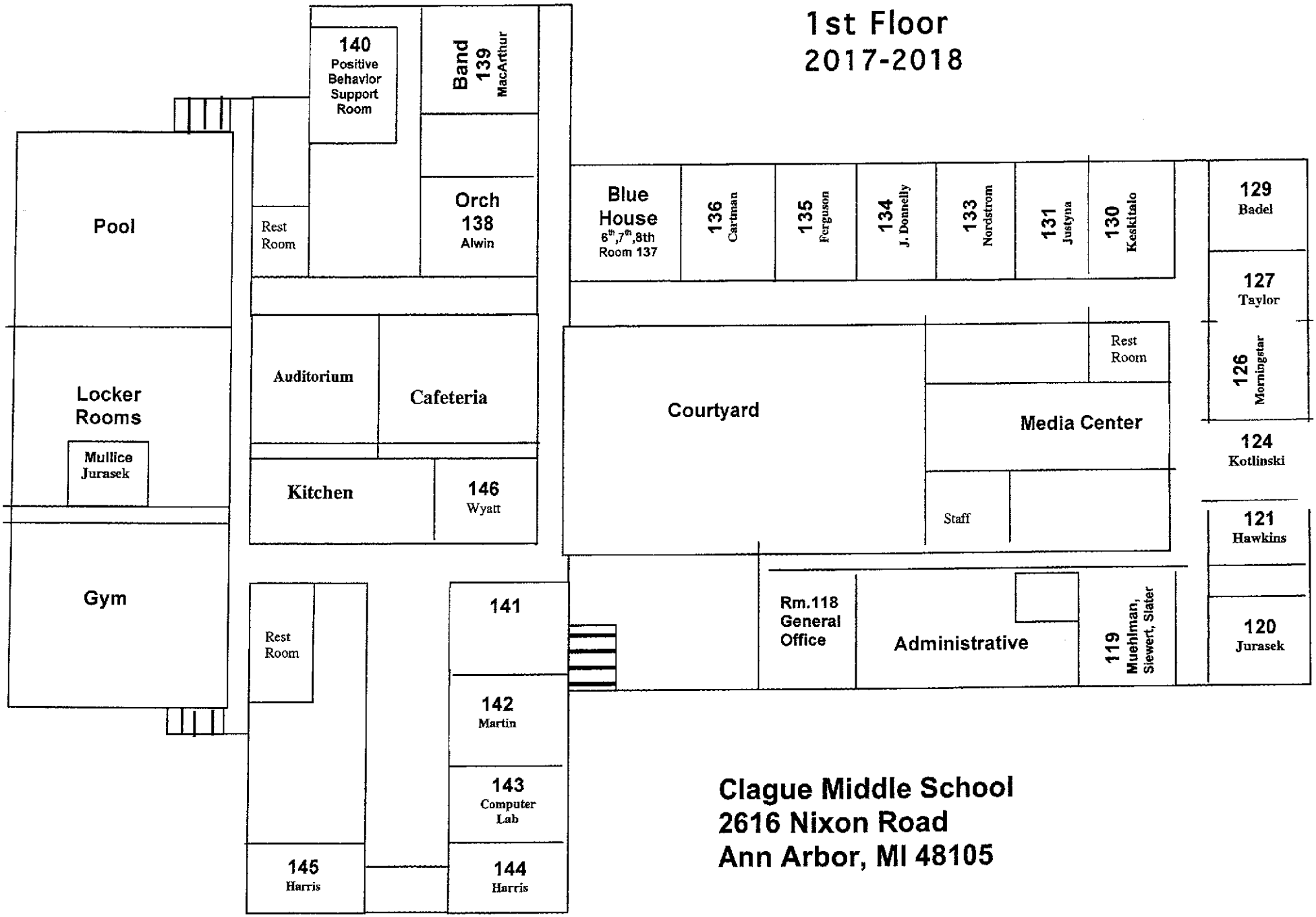
#69:	CLASSROOMS

#70:	LIBRARY

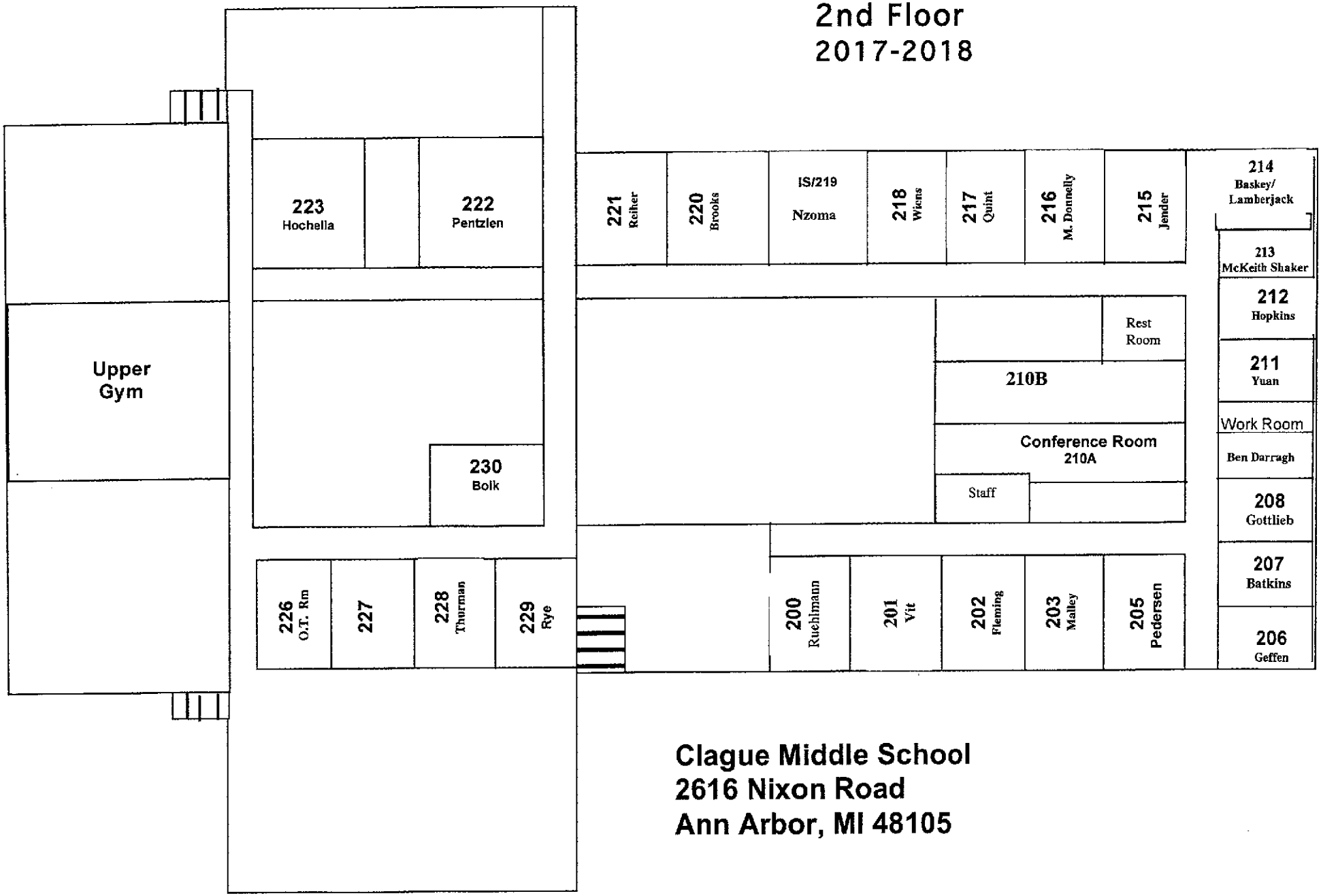
Appendix B:
Site and Floor Plans

Site Plan

emg	**Project Name:** Clague Middle School	**Project Number:** 129010.18R000-026.354
	Source: Google Earth	**On-Site Date:** February 1, 2018


1st Floor
2017-2018
140
Positive
Behavior
Support
Room
Band
139
MacArthur
Orch
138
Alwin
Rest
Room
Pool
Locker
Rooms
Mullice
Jurasek
Gym
Auditorium
Cafeteria
Kitchen
146
Wyatt
Blue
House
6th,7th,8th
Room 137
136
Cartman
135
Ferguson
134
J. Donnelly
133
Nordstrom
131
Justyna
130
Keskitalo
129
Badel
127
Taylor
126
Morningstar
124
Kotlinski
Courtyard
Rest
Room
Media Center
Staff
121
Hawkins
120
Jurasek
Rm.118
General
Office
Administrative
119
Muehlman,
Siewert, Slater
Rest
Room
141
142
Martin
143
Computer
Lab
145
Harris
144
Harris
Clague Middle School
2616 Nixon Road
Ann Arbor, MI 48105

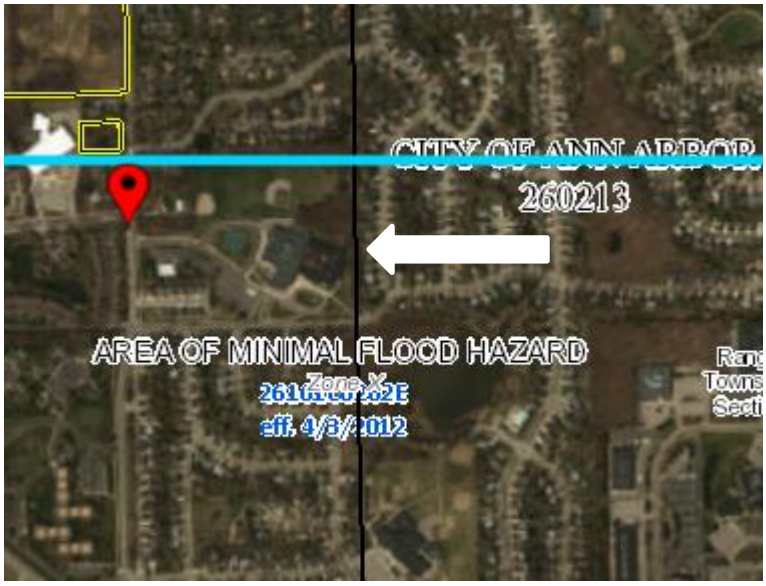
2nd Floor
2017-2018



Clague Middle School
2616 Nixon Road
Ann Arbor, MI 48105

Appendix C:
Supporting Documentation

Site Plan



emg	**Project Name:** Clague Middle School	**Project Number:** 129010.18R000-026.354
	Source: FEMA Flood Maps	**On-Site Date:** February 1, 2018

Appendix D:
Pre-Survey Questionnaire

FCA (EMG-FacilityDude)
Pre-Survey Questionnaire

This questionnaire must be completed by the property owner, the owner's designated representative, or someone knowledgeable about the subject property. 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 report.

Name of Institution:			
Name of Building: Clague		Building #:	
Name of person completing questionnaire: Jim Vibbart			
Length of Association With the Property: 2.5 years		Phone Number:	

Site Information	
Year of Construction?	1970
No. of Stories?	2
Total Site Area?	
Total Building Area?	156,000

Inspections	Date of Last Inspection	List of Any Outstanding Repairs Required
1. Elevators	—	
2. HVAC Mechanical, Electric, Plumbing?	—	
3. Life-Safety/Fire?	—	
4. Roofs?	—	

Key Questions	Response
Major Capital Improvements in Last 3 yrs.	New exterior lighting
Planned Capital Expenditure For Next Year?	Interior needs paint, bathrooms up to date, replace doors
Age of the Roof?	2005 - patch & repair
What bldg. Systems Are Responsibilities of Tenants? (HVAC/Roof/Interior/Exterior/Paving)	—

Rust in pool - sagging tiles & molding tiles - inspection done on January 30, 2018.

Gym - not enough seating space - floor needs to be redone lighting needs to be redone

Courtyard - all overgrown

Office electric shorts out electricity not adequate

FCA (EMG-FacilityDude)
Pre-Survey Questionnaire

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	Y	N	Unk	NA	Comments
	Zoning, Building Design & Life Safety Issues					
1	Are there any unresolved building, fire, or zoning code issues?		X			
2	Is there any pending litigation concerning the property?		X			
3	Are there any other significant issues/hazards with the property?		X			
4	Are there any unresolved construction defects at the property?		X			
5	Has any part of the property ever contained visible suspect mold growth?	X				
	Question	Y	N	Unk	NA	Comments
6	Is there a mold Operations and Maintenance Plan?	X				
7	Are there any recalled fire sprinkler heads (Star, GEM, Central, and Omega)?		X			
8	Have there been indoor air quality or mold related complaints from tenants?		X			
	General Site					
9	Are there any problems with erosion, storm water drainage or areas of paving that do not drain?		X			
10	Are there any problems with the landscape irrigation systems?				X	
	Building Structure					
11	Are there any problems with foundations or structures?		X			
12	Is there any water infiltration in basements or crawl spaces?		X			
13	Has a termite/wood boring insect inspection been performed within the last year?		X			
	Building Envelope					
14	Are there any wall, or window leaks?		X			

FCA (EMG-FacilityDude)
Pre-Survey Questionnaire

15	Are there any roof leaks?		X			
16	Is the roofing covered by a warranty or bond?		X			
17	Are there any poorly insulated areas?		X			
18	Is Fire Retardant Treated (FRT) plywood used?		X			
19	Is exterior insulation and finish system (EIFS) or a synthetic stucco finish used?		X			

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	Y	N	Unk	NA	Comments
	Building HVAC and Electrical					
20	Are there any leaks or pressure problems with natural gas service?		X			
21	Does any part of the electrical system use aluminum wiring?		X			
22	Do Residential units have a less than 60-Amp service?		X			
23	Do Commercial units have less than 200-Amp service?		X			
24	Are there any problems with the utilities, such as inadequate capacities?	X				office space
	ADA					
25	Has the management previously completed an ADA review?		X			
26	Have any ADA improvements been made to the property?		X			
27	Does a Barrier Removal Plan exist for the property?		X			
28	Has the Barrier Removal Plan been approved by an arms-length third party?		X			
29	Has building ownership or management received any ADA related complaints?		X			
30	Does elevator equipment require upgrades to meet ADA standards?		X			

FCA (EMG-FacilityDude)
Pre-Survey Questionnaire

PLUMBING						
31	Is the property served by private water well?		X			
32	Is the property served by a private septic system or other waste treatment systems?		X			
33	Is polybutylene piping used?		X			
34	Are there any plumbing leaks or water pressure problems?		X			

Additional Issues or Concerns That EMG Should Know About?	
1.	
2.	
3.	

Items Provided to EMG Auditors				
	Yes	No	N/A	Additional Comments?
Access to All Mechanical Spaces	☒	☐	☐	
Access to Roof/Attic Space	☒	☐	☐	
Access to Building As-Built Drawings	☐	☒	☐	
Site plan with bldg., roads, parking and other features	☐	☒	☐	
Contact Details for Mech, Elevator, Roof, Fire Contractors:	☐	☒	☐	
List of Commercial Tenants in the property	☐	☒	☐	
Previous reports pertaining to the physical condition of property.	☐	☒	☐	
ADA survey and status of improvements implemented.	☐	☒	☐	
Current / pending litigation related to property condition.	☐	☒	☐	
Any brochures or marketing information.	☐	☒	☐	

Signature of person Interviewed or completing form

Date

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.

INFORMATION REQUIRED	
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.	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 and 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.

Your timely compliance with this request is greatly appreciated.