FACILITY CONDITION ASSESSMENT

Prepared for

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

FACILITY CONDITION ASSESSMENT

OF

HURON HIGH SCHOOL, FIELD, 2 TICKET BUILDINGS
2727 FULLER ROAD
ANN ARBOR, MICHIGAN 48105

PREPARED BY:
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EMG PROJECT #:
129010.18R000-034.354

DATE OF REPORT:
July 2, 2018

ONSITE DATE:
February 12- February 14, 2018

Immediate Repairs Report
Huron High School, Field, 2 Ticket Buildings
7/2/2018

EMG Renamed Item Number	Location Description	ID	Cost Description	Quantity	Unit	Unit Cost *	Subtotal	Deficiency Repair Estimate *
1.2	Surrounding Pool Hallway	854609	Architect/Engineer, Building Envelope, Masonry, Evaluate/Report	1	EA	$7,475.00	$7,475	**$7,475**
C10	Pool hallway	852932	Interior Wall Finish, Concrete, Repair	250	SF	$34.78	$8,696	**$8,696**
C10	Testing Room	853004	Interior Wall Finish, Gypsum Board/Plaster, Repair	500	SF	$3.66	$1,829	**$1,829**
C10	Room 115	852959	Interior Wall Finish, Concrete, Repair	100	SF	$34.78	$3,478	**$3,478**
C10	Clinic Room 2	853130	Interior Floor Finish, Vinyl Tile (VCT), Repair	300	SF	$3.93	$1,179	**$1,179**
C10	Throughout building	852853	Interior Ceiling Finish, Suspended Acoustical Tile (ACT), Repair	1000	SF	$3.57	$3,567	**$3,567**
D20	Restroom	852993	Urinal, Vitreous China, Replace	2	EA	$1,372.46	$2,745	**$2,745**
D30	Stairwell	852951	Wall Heater, Gas w/ Electric Fan, Replace	1	EA	$962.79	$963	**$963**
D30	Science room	853198	Laboratory Exhaust Hood, 4 LF, Replace	1	EA	$3,028.95	$3,029	**$3,029**
E10	Kitchen	853120	Commercial Kitchen, Kiln, Replace	1	EA	$25,806.00	$25,806	**$25,806**
E10	Kitchen	852995	Commercial Kitchen, Tilting Skillet, Replace	1	EA	$25,806.00	$25,806	**$25,806**
E10	Kitchen	853025	Commercial Kitchen, Kiln, Replace	1	EA	$25,806.00	$25,806	**$25,806**
	Site	958695	Davis Bacon Prevailing Wages, Surcharge for Prevailing Wages, 10% surcharge for prevailing wages	364660.83	LS	$1.15	$419,360	**$419,360**
Immediate Repairs Total								**$529,740**

* Location Factor (1.0) included in totals.

Replacement Reserves Report

Huron High School, Field, 2 Ticket Buildings

10/23/2019

Location	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Total Escalated Estimate
Huron High School, Field, 2 Ticket Buildings	$529,739	$4,177,785	$444,899	$8,498,048	$14,835,148	$6,552,397	$1,312,783	$6,516,442	$1,086,331	$3,010,769	$675,204	$1,284,512	$16,125,459	$1,935,090	$1,350,754	$6,886,990	$1,435,641	$2,176,051	$2,697,139	$5,108,715	$2,411,901	**$89,051,796**
Grand Total	**$529,739**	**$4,177,785**	**$444,899**	**$8,498,048**	**$14,835,148**	**$6,552,397**	**$1,312,783**	**$6,516,442**	**$1,086,331**	**$3,010,769**	**$675,204**	**$1,284,512**	**$16,125,459**	**$1,935,090**	**$1,350,754**	**$6,886,990**	**$1,435,641**	**$2,176,051**	**$2,697,139**	**$5,108,715**	**$2,411,901**	**$89,051,796**

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
B1015	860087	Exterior Stair/Ramp Rails, Metal, Paint	25	24	1	25	LF	$57.50	$1,437		$1,437																				**$1,437**
B2011	858848	Exterior Wall, Brick or Brick Veneer, 3+ Stories, Repoint	25	13	12	135520	SF	$52.27	$7,083,136													$7,083,136									**$7,083,136**
B2021	858843	Window, SF, Replace	30	29	1	19	EA	$1,507.93	$28,651		$28,651																				**$28,651**
B2021	858833	Window, Steel Fixed 24 SF, 3+ Stories, Replace	30	29	1	26	EA	$1,581.95	$41,131		$41,131																				**$41,131**
B2021	858827	Window, SF, Replace	30	29	1	575	EA	$925.30	$532,048		$532,048																				**$532,048**
B2031	858832	Exterior Door, Fully-Glazed Aluminum-Framed Swinging, Replace	30	29	1	28	EA	$2,422.56	$67,832		$67,832																				**$67,832**
B2032	858840	Exterior Door, Steel, Replace	25	24	1	4	EA	$1,092.64	$4,371		$4,371																				**$4,371**
B2032	858823	Exterior Door, Steel, Replace	25	24	1	29	EA	$1,092.64	$31,687		$31,687																				**$31,687**
B2032	858825	Exterior Door, Steel Insulated, Replace	25	24	1	8	EA	$1,814.16	$14,513		$14,513																				**$14,513**
B2032	858811	Exterior Door, Steel, Replace	25	24	1	18	EA	$1,092.64	$19,667		$19,667																				**$19,667**
B2034	853180	Overhead Door, Aluminum Roll-Up 144 SF, Replace	35	18	17	1	EA	$4,629.37	$4,629																	$4,629					**$4,629**
B2034	858824	Overhead Door, Aluminum Roll-Up 144 SF, Replace	35	18	17	2	EA	$4,629.37	$9,259																	$9,259					**$9,259**
B2034	858846	Overhead Door, Steel Roll-Up 400 SF, Replace	35	18	17	3	EA	$9,453.97	$28,362																	$28,362					**$28,362**
B2034	858818	Overhead Door, Aluminum Roll-Up 144 SF, Replace	35	18	17	4	EA	$4,629.37	$18,517																	$18,517					**$18,517**
B3011	852871	Roof, Single-Ply EPDM Membrane, Replace	20	19	1	170000	SF	$12.10	$2,056,660		$2,056,660																				**$2,056,660**
C1021	852920	Interior Door, Wood Hollow-Core, Replace	20	17	3	20	EA	$686.00	$13,720				$13,720																		**$13,720**
C1021	853168	Interior Door, Wood Solid-Core w/ Safety Glass, Replace	20	16	4	112	EA	$2,217.23	$248,330					$248,330																	**$248,330**
C1021	853022	Interior Door, Steel, Replace	25	18	7	20	EA	$1,092.64	$21,853								$21,853														**$21,853**
C1021	853080	Interior Door, Steel w/ Safety Glass, Replace	20	13	7	16	EA	$1,555.63	$24,890								$24,890														**$24,890**
C1023	946242	Exterior Door Hardware, Electronic Door Locks ANSI F39 Lockset, Replace	30	29	1	28	EA	$1,546.75	$43,309		$43,309																				**$43,309**
C1031	858814	Toilet Partitions, Metal Overhead-Braced, Replace	20	15	5	8	EA	$977.50	$7,820						$7,820																**$7,820**
C1031	853047	Toilet Partitions, Metal Overhead-Braced, Replace	20	11	9	108	EA	$977.50	$105,570										$105,570												**$105,570**
C1033	852974	Lockers, Steel Baked Enamel 12" W x 15" D x 72" H, 1 to 5 Tiers, Replace	20	19	1	100	EA	$554.88	$55,488		$55,488																				**$55,488**
C1033	853112	Lockers, Steel Baked Enamel 12" W x 15" D x 72" H, 1 to 5 Tiers, Replace	20	14	6	1000	EA	$554.88	$554,875							$554,875															**$554,875**
C2011	853033	Interior Stair/Ramp Rails, Metal, Replace	30	18	12	100	LF	$57.50	$5,750													$5,750									**$5,750**
C3011	852928	Interior Wall Finish, Clay Brick, Repoint	25	24	1	250	SF	$14.27	$3,568		$3,568																				**$3,568**
C3012	852932	Interior Wall Finish, Concrete, Repair	0	0	0	250	SF	$34.79	$8,697	$8,697																					**$8,697**
C3012	853004	Interior Wall Finish, Gypsum Board/Plaster, Repair	0	0	0	500	SF	$3.66	$1,829	$1,829																					**$1,829**
C3012	852959	Interior Wall Finish, Concrete, Repair	0	0	0	100	SF	$34.79	$3,479	$3,479																					**$3,479**
C3012	853145	Interior Wall Finish, Concrete/Masonry, Prep & Paint	8	7	1	133549	SF	$1.67	$222,693		$222,693								$222,693												**$668,079**
C3012	859648	Interior Wall Finish, Concrete/Masonry, Prep & Paint	8	5	3	300000	SF	$1.67	$500,250				$500,250								$500,250								$500,250		**$1,500,750**
C3012	853165	Interior Wall Finish, Tectrum, Replace	10	7	3	8104	SF	$8.71	$70,549				$70,549									$70,549									**$141,099**
C3012	852947	Interior Wall Finish, Gypsum Board/Plaster/Metal, Prep & Paint	8	4	4	316046	SF	$1.63	$516,103					$516,103								$516,103								$516,103	**$1,548,309**
C3012	853155	Interior Wall Finish, Ceramic Tile, Replace	25	18	7	40519	SF	$19.03	$771,178								$771,178														**$771,178**
C3024	853130	Interior Floor Finish, Vinyl Tile (VCT), Repair	0	0	0	300	SF	$3.93	$1,180	$1,180																					**$1,180**
C3024	853135	Interior Floor Finish, Vinyl Tile (VCT), Replace	15	12	3	162075	SF	$5.52	$894,654				$894,654															$894,654			**$1,789,308**
C3024	852881	Interior Floor Finish, Wood Strip, Refinish	10	6	4	750	SF	$4.23	$3,174					$3,174											$3,174						**$6,348**
C3024	852907	Interior Floor Finish, Maple Sports Floor, Refinish	10	5	5	8104	SF	$5.21	$42,218						$42,218										$42,218						**$84,436**
C3024	852966	Interior Floor Finish, Ceramic Tile, Replace	50	38	12	20259	SF	$18.12	$367,174													$367,174									**$367,174**
C3024	852976	Interior Floor Finish, Quarry Tile, Replace	50	33	17	4052	SF	$17.47	$70,782																		$70,782				**$70,782**
C3024	853144	Interior Floor Finish, Terrazzo, Replace	50	31	19	129660	SF	$13.87	$1,798,255																				$1,798,255		**$1,798,255**
C3025	853041	Interior Floor Finish, Carpet Standard-Commercial Medium-Traffic, Replace	10	9	1	1000	SF	$8.35	$8,349		$8,349										$8,349										**$16,698**
C3025	852868	Interior Floor Finish, Carpet Standard-Commercial Medium-Traffic, Replace	10	7	3	81037	SF	$8.35	$676,578				$676,578										$676,578								**$1,353,156**
C3031	853201	Interior Ceiling Finish, Gypsum Board/Plaster, Prep & Paint	10	6	4	162075	SF	$2.23	$361,589					$361,589										$361,589							**$723,179**
C3032	852853	Interior Ceiling Finish, Suspended Acoustical Tile (ACT), Repair	0	0	0	1000	SF	$3.57	$3,565	$3,565																					**$3,565**
C3032	853091	Interior Ceiling Finish, Suspended Acoustical Tile (ACT), Replace	20	13	7	243112	SF	$3.58	$869,490								$869,490														**$869,490**
D1011	853082	Elevator Controls, Automatic, 1 Car Cluster, Modernize	20	16	4	4	EA	$13,279.34	$53,117					$53,117																	**$53,117**
D1011	852903	Elevator, Hydraulic, 1500 to 2500 LB, 3 Floors, Renovate	30	18	12	4	EA	$166,160.28	$664,641													$664,641									**$664,641**
D1013	853200	Wheelchair Lift, , Renovate	25	18	7	1	EA	$19,150.71	$19,151								$19,151														**$19,151**

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
D1013	852901	Wheelchair Lift, , Renovate	25	18	7	1	EA	$19,150.71	$19,151								$19,151															**$19,151**
D1013	853059	Wheelchair Lift, , Renovate	25	18	7	1	EA	$19,150.71	$19,151								$19,151															**$19,151**
D1013	853015	Wheelchair Lift, , Renovate	25	18	7	1	EA	$19,150.71	$19,151								$19,151															**$19,151**
D2011	853068	Toilet, Tankless (Water Closet), Replace	20	13	7	117	EA	$969.42	$113,422								$113,422															**$113,422**
D2011	858845	Toilet, Tankless (Water Closet), Replace	20	13	7	13	EA	$969.42	$12,602								$12,602															**$12,602**
D2012	852993	Urinal, Vitreous China, Replace	20	20	0	2	EA	$1,372.46	$2,745	$2,745																				$2,745	**$5,490**
D2012	858854	Urinal, Vitreous China, Replace	20	17	3	2	EA	$1,969.18	$3,938				$3,938																		**$3,938**
D2012	852918	Urinal, Vitreous China, Replace	20	11	9	32	EA	$1,372.46	$43,919										$43,919												**$43,919**
D2013	858821	Lavatory, Enameled Steel, Replace	20	12	8	8	EA	$406.01	$3,248									$3,248													**$3,248**
D2013	853032	Lavatory, Vitreous China, Replace	20	10	10	111	EA	$658.56	$73,100											$73,100											**$73,100**
D2014	853100	Service Sink, Porcelain Enamel, Cast Iron, Replace	20	17	3	4	EA	$1,564.38	$6,258				$6,258																		**$6,258**
D2014	852904	Sink, Stainless Steel, Replace	20	13	7	1	EA	$1,212.16	$1,212								$1,212														**$1,212**
D2014	852985	Sink, Vitreous China, Replace	20	12	8	1	EA	$861.51	$862									$862													**$862**
D2014	853060	Service Sink, Porcelain Enamel, Cast Iron, Replace	20	12	8	1	EA	$10,950.66	$10,951									$10,951													**$10,951**
D2014	853138	Sink, Plastic, Replace	20	12	8	3	EA	$662.39	$1,987									$1,987													**$1,987**
D2014	853113	Sink, Stainless Steel, Replace	20	11	9	17	EA	$1,212.16	$20,607										$20,607												**$20,607**
D2014	853194	Sink, Pot, Multi-compartment, Replace	30	18	12	30	EA	$1,451.88	$43,556													$43,556									**$43,556**
D2014	852865	Sink, Pot, Multi-compartment, Replace	30	18	12	6	EA	$1,451.88	$8,711													$8,711									**$8,711**
D2014	853090	Service Sink, Floor, Replace	35	18	17	12	EA	$1,839.44	$22,073																		$22,073				**$22,073**
D2017	853149	Shower, Steel, Replace	20	15	5	93	EA	$1,150.00	$106,950						$106,950																**$106,950**
D2017	852921	Shower, Ceramic Tile, Replace	30	18	12	7	EA	$2,281.35	$15,969													$15,969									**$15,969**
D2018	853190	Drinking Fountain, Vitreous China, Replace	15	10	5	16	EA	$2,229.84	$35,677						$35,677															$35,677	**$71,355**
D2018	852845	Drinking Fountain, Refrigerated, Replace	10	5	5	27	EA	$1,446.14	$39,046						$39,046											$39,046						**$78,091**
D2019	852969	Emergency Eye Wash, , Replace	15	12	3	28	EA	$1,629.60	$45,629				$45,629															$45,629				**$91,257**
D2019	856001	Emergency Eye Wash & Shower Station, Replace	15	12	3	1	EA	$2,431.91	$2,432				$2,432															$2,432				**$4,864**
D2021	858856	Backflow Preventer, 2", Replace	15	12	3	1	EA	$2,993.65	$2,994				$2,994															$2,994				**$5,987**
D2021	853054	Backflow Preventer, 2", Replace	15	11	4	1	EA	$2,993.65	$2,994					$2,994															$2,994			**$5,987**
D2021	853076	Backflow Preventer, .75 INCH, Replace	15	11	4	1	EA	$1,161.99	$1,162					$1,162															$1,162			**$2,324**
D2021	853114	Backflow Preventer, 2 INCH, Replace	15	10	5	1	EA	$2,993.65	$2,994						$2,994															$2,994		**$5,987**
D2021	852854	Backflow Preventer, 3 INCH, Replace	15	10	5	1	EA	$5,469.52	$5,470						$5,470															$5,470		**$10,939**
D2023	853056	Water Heater, 119 GAL, Replace	15	12	3	1	EA	$3,378.01	$3,378				$3,378															$3,378				**$6,756**
D2023	852879	Water Heater, 40 GAL, Replace	10	7	3	1	EA	$2,701.90	$2,702				$2,702										$2,702									**$5,404**
D2023	852934	Water Heater, 12 GAL, Replace	15	12	3	1	EA	$1,166.30	$1,166				$1,166															$1,166				**$2,333**
D2023	853204	Water Heater, 30 GAL, Replace	15	12	3	1	EA	$8,007.73	$8,008				$8,008															$8,008				**$16,015**
D2023	852958	Water Heater, 1440 MBH, Replace	22	14	8	1	EA	$49,281.39	$49,281									$49,281														**$49,281**
D2023	852997	Water Heater, 1440 MBH, Replace	22	14	8	1	EA	$49,281.39	$49,281									$49,281														**$49,281**
D2023	852884	Water Heater, Gas, Residential, 116 GAL, Replace	10	2	8	1	EA	$4,058.27	$4,058									$4,058										$4,058				**$8,117**
D2023	853119	Water Softener, 251 - 500 GAL, Replace	20	12	8	1	EA	$5,113.50	$5,113									$5,113														**$5,113**
D2023	853073	Water Heater, Gas, Residential, 116 GAL, Replace	10	1	9	1	EA	$4,058.27	$4,058										$4,058										$4,058			**$8,117**
D2023	853159	Water Heater, 12 GAL, Replace	15	6	9	1	EA	$1,166.30	$1,166										$1,166													**$1,166**
D2043	852968	Sump Pump, 3 HP, Replace	15	11	4	1	EA	$2,372.23	$2,372					$2,372															$2,372			**$4,744**
D2043	853154	Sump Pump, 20 HP, Replace	20	16	4	1	EA	$8,232.24	$8,232					$8,232																		**$8,232**
D2091	853049	Air Compressor, 10 HP, Replace	20	17	3	1	EA	$16,880.79	$16,881				$16,881																			**$16,881**
D2091	852970	Air Compressor, 2 HP, Replace	20	17	3	1	EA	$7,603.49	$7,603				$7,603																			**$7,603**
D2091	853158	Air Compressor, 2 HP, Replace	20	17	3	1	EA	$7,603.49	$7,603				$7,603																			**$7,603**
D2091	853184	Air Compressor, 2 HP, Replace	20	16	4	1	EA	$7,603.49	$7,603					$7,603																		**$7,603**
D2091	853133	Air Compressor, 2 HP, Replace	20	14	6	1	EA	$7,603.49	$7,603							$7,603																**$7,603**
D2091	853134	Gas Distribution System, 10 HP, Replace	20	7	13	1	EA	$16,880.79	$16,881														$16,881									**$16,881**
D2091	852930	Air Compressor, 2 HP, Replace	20	7	13	1	EA	$7,603.49	$7,603														$7,603									**$7,603**
D3016	960788	Solar Instillation Project, Roof Mounted Solar Instillation, Install	20	15	5	1836000	SF	$1.15	$2,111,400						$2,111,400																	**$2,111,400**
D3021	852965	Boiler, 2100 MBH, Replace	25	22	3	1	EA	$62,324.50	$62,325				$62,325																			**$62,325**
D3021	853131	Boiler, 9000 MBH, Replace	25	22	3	1	EA	$382,797.63	$382,798				$382,798																			**$382,798**
D3021	852982	Boiler, 1330 MBH, Replace	25	22	3	1	EA	$53,435.22	$53,435				$53,435																			**$53,435**
D3021	853171	Boiler, Gas, 9,000 MBH, Replace	25	21	4	1	EA	$382,797.63	$382,798					$382,798																		**$382,798**
D3021	852891	Boiler, 1800 MBH, Replace	25	18	7	1	EA	$53,435.22	$53,435								$53,435															**$53,435**
D3021	852929	Boiler, 1800 MBH, Replace	25	18	7	1	EA	$53,435.22	$53,435								$53,435															**$53,435**
D3021	853106	Boiler, 1300 MBH, Replace	25	8	17	1	EA	$53,435.22	$53,435																		$53,435					**$53,435**
D3021	853104	Boiler, 1300 MBH, Replace	25	8	17	1	EA	$53,435.22	$53,435																		$53,435					**$53,435**

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
D3022	853179	Chemical Feed System, , Replace	25	18	7	1	EA	$12,238.58	$12,239								$12,239															**$12,239**
D3031	853005	Chiller, Reciprocal Water-Cooled, 240 Ton, Replace	25	22	3	1	EA	$226,628.09	$226,628				$226,628																			**$226,628**
D3031	852861	Cooling Tower, 240 Ton, Replace	20	5	15	1	EA	$56,026.62	$56,027																$56,027							**$56,027**
D3032	858822	Condensing Unit/Heat Pump, Split System, 21 to 30 Ton, Replace	15	11	4	1	EA	$47,540.97	$47,541					$47,541															$47,541			**$95,082**
D3041	852898	Air Handler, Interior, 1,301 to 2,500 CFM, Replace	20	17	3	1	EA	$10,826.05	$10,826				$10,826																			**$10,826**
D3041	852910	Air Handler, Interior, 1,301 to 2,500 CFM, Replace	20	17	3	1	EA	$10,826.05	$10,826				$10,826																			**$10,826**
D3041	852943	Air Handler, Interior, 7,000 CFM, Replace	30	27	3	1	EA	$29,919.11	$29,919				$29,919																			**$29,919**
D3041	853174	Air Handler, Interior, 2,501 to 4,000 CFM, Replace	20	17	3	1	EA	$15,377.20	$15,377				$15,377																			**$15,377**
D3041	852933	Air Handler, Interior, 10,001 to 15,000 CFM, Replace	30	27	3	1	EA	$48,276.05	$48,276				$48,276																			**$48,276**
D3041	852961	Air Handler, Interior, 1,301 to 2,500 CFM, Replace	20	17	3	1	EA	$10,826.05	$10,826				$10,826																			**$10,826**
D3041	853089	Air Handler, Interior, 10,001 to 15,000 CFM, Replace	30	27	3	1	EA	$48,276.05	$48,276				$48,276																			**$48,276**
D3041	852905	Air Handler, Interior, 5,500 CFM, Replace	30	27	3	1	EA	$25,498.92	$25,499				$25,499																			**$25,499**
D3041	853045	Air Handler, Interior, 8,001 to 10,000 CFM, Replace	30	27	3	1	EA	$35,858.76	$35,859				$35,859																			**$35,859**
D3041	852924	Air Handler, Interior, 10,001 to 15,000 CFM, Replace	30	26	4	1	EA	$48,276.05	$48,276					$48,276																		**$48,276**
D3041	853103	Air Handler, Exterior, 1,201 to 2,000 CFM, Replace	15	11	4	1	EA	$13,132.80	$13,133					$13,133															$13,133			**$26,266**
D3041	853140	Air Handler, Interior, 5,201 to 6,500 CFM, Replace	30	23	7	1	EA	$25,498.92	$25,499								$25,499															**$25,499**
D3041	853169	Air Handler, Interior, 50,625 CFM, Replace	30	18	12	1	EA	$219,840.98	$219,841													$219,841										**$219,841**
D3042	852860	Exhaust Fan, Centrifugal, 10,001 to 16,000 CFM, Replace	15	12	3	1	EA	$11,692.13	$11,692				$11,692																$11,692			**$23,384**
D3042	853185	Exhaust Fan, Centrifugal, 5,001 to 8,000 CFM, Replace	15	12	3	1	EA	$6,405.55	$6,406				$6,406																$6,406			**$12,811**
D3042	853167	Exhaust Fan, Centrifugal, 5,001 to 8,000 CFM, Replace	15	11	4	1	EA	$6,405.55	$6,406					$6,406																$6,406		**$12,811**
D3042	853078	Exhaust Fan, Centrifugal, 5,001 to 8,000 CFM, Replace	15	11	4	1	EA	$6,405.55	$6,406					$6,406																$6,406		**$12,811**
D3042	852980	Exhaust Fan, 25001 - 30000 CFM, Replace	15	10	5	1	EA	$17,705.60	$17,706						$17,706															$17,706	**$35,411**
D3042	853105	Exhaust Fan, 3501 - 5000 CFM, Replace	15	10	5	1	EA	$4,970.93	$4,971						$4,971															$4,971	**$9,942**
D3042	852867	Exhaust Fan, 10001 - 16000 CFM, Replace	15	10	5	1	EA	$11,692.13	$11,692						$11,692															$11,692	**$23,384**
D3042	853097	Exhaust Fan, 800 CFM, Replace	15	10	5	1	EA	$1,591.19	$1,591						$1,591															$1,591	**$3,182**
D3044	853077	Circulation Pump, 20 HP, Replace	20	17	3	1	EA	$14,288.34	$14,288				$14,288																			**$14,288**
D3044	853107	Circulation Pump, 10 HP, Replace	20	17	3	1	EA	$7,173.34	$7,173				$7,173																			**$7,173**
D3044	853007	Circulation Pump, 3 HP, Replace	20	17	3	1	EA	$5,350.13	$5,350				$5,350																			**$5,350**
D3044	853079	Circulation Pump, 3 HP, Replace	20	17	3	1	EA	$5,350.13	$5,350				$5,350																			**$5,350**
D3044	852963	Circulation Pump, 10 HP, Replace	20	17	3	1	EA	$7,173.34	$7,173				$7,173																			**$7,173**
D3044	852855	Circulation Pump, 3 HP, Replace	20	17	3	1	EA	$5,350.13	$5,350				$5,350																			**$5,350**
D3044	853157	Circulation Pump, 10 HP, Replace	20	17	3	1	EA	$7,173.34	$7,173				$7,173																			**$7,173**
D3044	853013	Circulation Pump, 20 HP, Replace	20	17	3	1	EA	$14,288.34	$14,288				$14,288																			**$14,288**
D3044	853009	Circulation Pump, 5 HP, Replace	20	17	3	1	EA	$6,346.71	$6,347				$6,347																			**$6,347**
D3044	852940	Circulation Pump, 3 HP, Replace	20	17	3	1	EA	$5,350.13	$5,350				$5,350																			**$5,350**
D3044	852938	Circulation Pump, 7.5 HP, Replace	20	17	3	1	EA	$6,943.11	$6,943				$6,943																			**$6,943**
D3044	852883	Circulation Pump, 7.5 HP, Replace	20	15	5	1	EA	$6,943.11	$6,943						$6,943																	**$6,943**
D3044	853123	Circulation Pump, 3 HP, Replace	20	15	5	1	EA	$5,350.13	$5,350						$5,350																	**$5,350**
D3044	852948	Circulation Pump, 2 HP, Replace	20	12	8	1	EA	$5,350.13	$5,350									$5,350														**$5,350**
D3044	852996	Circulation Pump, 2 HP, Replace	20	12	8	1	EA	$5,350.13	$5,350									$5,350														**$5,350**
D3045	852895	Circulation Pump, 15 HP, Replace	20	17	3	1	EA	$7,889.85	$7,890				$7,890																			**$7,890**
D3045	853170	Circulation Pump, 20 HP, Replace	20	17	3	1	EA	$14,288.34	$14,288				$14,288																			**$14,288**
D3045	853193	Circulation Pump, 15 HP, Replace	20	17	3	1	EA	$7,889.85	$7,890				$7,890																			**$7,890**
D3045	853115	Circulation Pump, 15 HP, Replace	20	17	3	1	EA	$7,889.85	$7,890				$7,890																			**$7,890**
D3045	852864	Circulation Pump, 15 HP, Replace	20	17	3	1	EA	$7,889.85	$7,890				$7,890																			**$7,890**
D3045	853192	Circulation Pump, 20 HP, Replace	20	17	3	1	EA	$14,288.34	$14,288				$14,288																			**$14,288**
D3045	852939	Circulation Pump, 75 HP, Replace	20	17	3	1	EA	$35,732.57	$35,733				$35,733																			**$35,733**
D3045	853038	Circulation Pump, 75 HP, Replace	20	17	3	1	EA	$35,732.57	$35,733				$35,733																			**$35,733**
D3045	853176	Circulation Pump, 15 HP, Replace	20	17	3	1	EA	$7,889.85	$7,890				$7,890																			**$7,890**
D3045	853172	Circulation Pump, 15 HP, Replace	20	17	3	1	EA	$7,889.85	$7,890				$7,890																			**$7,890**
D3051	852951	Wall Heater, Gas w/ Electric Fan, Replace	20	20	0	1	EA	$962.79	$963	$963																				$963	**$1,926**
D3051	853020	Wall Heater, Gas w/ Electric Fan, Replace	20	17	3	3	EA	$1,107.21	$3,322				$3,322																			**$3,322**
D3051	853042	Cabinet Heater, Electric, Replace	20	17	3	27	EA	$3,656.93	$98,737				$98,737																			**$98,737**
D3051	853026	Unit Heater, Hydronic, 8 to 12 MBH, Replace	20	17	3	1	EA	$880.85	$881				$881																			**$881**
D3051	853127	Unit Heater, 37 - 85 MBH, Replace	20	16	4	2	EA	$2,185.32	$4,371					$4,371																		**$4,371**
D3051	853065	Unit Heater, 8 - 12 MBH, Replace	20	13	7	5	EA	$1,012.98	$5,065								$5,065															**$5,065**
D3068	853181	Building Automation System (HVAC Controls), , Upgrade	20	17	3	405187	SF	$6.16	$2,497,573				$2,497,573																			**$2,497,573**
D4011	853010	Backflow Preventer, 6", Replace	15	9	6	1	EA	$10,746.21	$10,746							$10,746																**$10,746**

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
D4019	853088	Sprinkler System, Full Retrofit, School (per SF), Renovate	50	46	4	384487	SF	$7.19	$2,763,500					$2,763,500																	**$2,763,500**
D4019	853028	Sprinkler Heads (per SF), , Replace	20	11	9	20700	SF	$1.53	$31,661										$31,661												**$31,661**
D4031	852916	Fire Extinguisher, , Replace	15	1	14	63	EA	$410.02	$25,831															$25,831							**$25,831**
D5012	853125	Secondary Transformer, 11 kVA, Replace	30	27	3	1	EA	$6,094.44	$6,094				$6,094																		**$6,094**
D5012	852926	Distribution Panel, 100 AMP, Replace	30	27	3	1	EA	$8,328.52	$8,329				$8,329																		**$8,329**
D5012	852927	Distribution Panel, 400 AMP, Replace	30	27	3	1	EA	$10,911.03	$10,911				$10,911																		**$10,911**
D5012	852922	Distribution Panel, 225 AMP, Replace	30	27	3	1	EA	$9,143.65	$9,144				$9,144																		**$9,144**
D5012	853118	Secondary Transformer, 27 kVA, Replace	30	27	3	1	EA	$6,999.31	$6,999				$6,999																		**$6,999**
D5012	853096	Variable Frequency Drive (VFD), 10 HP Motor, Replace	20	17	3	1	EA	$7,250.70	$7,251				$7,251																		**$7,251**
D5012	853116	Distribution Panel, 400 AMP, Replace	30	27	3	1	EA	$10,911.03	$10,911				$10,911																		**$10,911**
D5012	853043	Distribution Panel, 600 AMP, Replace	30	27	3	1	EA	$14,657.01	$14,657				$14,657																		**$14,657**
D5012	852981	Variable Frequency Drive (VFD), 10 HP Motor, Replace	20	17	3	1	EA	$7,250.70	$7,251				$7,251																		**$7,251**
D5012	853067	Distribution Panel, 250 AMP, Replace	30	27	3	1	EA	$9,143.65	$9,144				$9,144																		**$9,144**
D5012	853111	Distribution Panel, 400 AMP, Replace	30	27	3	1	EA	$12,882.32	$12,882				$12,882																		**$12,882**
D5012	853017	Distribution Panel, 600 AMP, Replace	30	27	3	1	EA	$14,657.01	$14,657				$14,657																		**$14,657**
D5012	852892	Secondary Transformer, 113 kVA, Replace	30	27	3	1	EA	$13,708.06	$13,708				$13,708																		**$13,708**
D5012	852999	Distribution Panel, 225 AMP, Replace	30	27	3	1	EA	$9,143.65	$9,144				$9,144																		**$9,144**
D5012	852873	Switchboard, 400 AMP, Replace	30	27	3	1	EA	$28,483.27	$28,483				$28,483																		**$28,483**
D5012	853109	Secondary Transformer, 75 kVA, Replace	30	27	3	1	EA	$10,171.69	$10,172				$10,172																		**$10,172**
D5012	853124	Switchboard, 2000 AMP, Replace	30	27	3	1	EA	$33,815.01	$33,815				$33,815																		**$33,815**
D5012	853014	Distribution Panel, 250 AMP, Replace	30	27	3	1	EA	$11,243.62	$11,244				$11,244																		**$11,244**
D5012	852857	Variable Frequency Drive (VFD), 7.5 HP Motor, Replace	20	17	3	1	EA	$6,484.03	$6,484				$6,484																		**$6,484**
D5012	853189	Distribution Panel, 600 AMP, Replace	30	27	3	1	EA	$14,657.01	$14,657				$14,657																		**$14,657**
D5012	852925	Secondary Transformer, 15 kVA, Replace	30	27	3	1	EA	$6,273.19	$6,273				$6,273																		**$6,273**
D5012	852972	Switchboard, 1600 AMP, Replace	30	27	3	1	EA	$30,350.42	$30,350				$30,350																		**$30,350**
D5012	853062	Variable Frequency Drive (VFD), 15 HP Motor, Replace	20	17	3	1	EA	$9,250.35	$9,250				$9,250																		**$9,250**
D5012	852887	Distribution Panel, 225 AMP, Replace	30	27	3	1	EA	$9,143.65	$9,144				$9,144																		**$9,144**
D5012	852876	Secondary Transformer, 30 kVA, Replace	30	27	3	1	EA	$6,999.31	$6,999				$6,999																		**$6,999**
D5012	853102	Switchboard, 800 AMP, Replace	30	27	3	1	EA	$28,483.27	$28,483				$28,483																		**$28,483**
D5012	852917	Switchboard, 400 AMP, Replace	30	27	3	1	EA	$28,483.27	$28,483				$28,483																		**$28,483**
D5012	853034	Distribution Panel, 225 AMP, Replace	30	27	3	1	EA	$9,143.65	$9,144				$9,144																		**$9,144**
D5012	852973	Distribution Panel, 600 AMP, Replace	30	27	3	1	EA	$14,657.01	$14,657				$14,657																		**$14,657**
D5012	852986	Variable Frequency Drive, 20 HP, Replace	20	17	3	1	EA	$10,557.23	$10,557				$10,557																		**$10,557**
D5012	852967	Distribution Panel, 225 AMP, Replace	30	27	3	1	EA	$9,143.65	$9,144				$9,144																		**$9,144**
D5012	852953	Variable Frequency Drive, 15 HP, Replace	20	16	4	1	EA	$9,250.35	$9,250					$9,250																	**$9,250**
D5012	853186	Variable Frequency Drive, 7.5 HP, Replace	20	16	4	1	EA	$6,484.03	$6,484					$6,484																	**$6,484**
D5012	853086	Variable Frequency Drive (VFD), 7.5 HP Motor, Replace	20	16	4	1	EA	$6,484.03	$6,484					$6,484																	**$6,484**
D5012	853139	Variable Frequency Drive (VFD), 7.5 HP Motor, Replace	20	16	4	1	EA	$6,484.03	$6,484					$6,484																	**$6,484**
D5012	852942	Variable Frequency Drive (VFD), 7.5 HP Motor, Replace	20	16	4	1	EA	$6,484.03	$6,484					$6,484																	**$6,484**
D5012	853030	Variable Frequency Drive (VFD), 10 HP Motor, Replace	20	16	4	1	EA	$7,250.70	$7,251					$7,251																	**$7,251**
D5012	852957	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	852850	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	852894	Secondary Transformer, 75 kVA, Replace	30	25	5	1	EA	$10,171.69	$10,172						$10,172																**$10,172**
D5012	852874	Distribution Panel, 400 AMP, Replace	30	25	5	1	EA	$10,911.03	$10,911						$10,911																**$10,911**
D5012	853177	Distribution Panel, 600 AMP, Replace	30	25	5	1	EA	$14,657.01	$14,657						$14,657																**$14,657**
D5012	853093	Distribution Panel, 800 AMP, Replace	30	25	5	1	EA	$15,571.95	$15,572						$15,572																**$15,572**
D5012	852856	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	852908	Distribution Panel, 125 AMP, Replace	30	25	5	1	EA	$8,328.52	$8,329						$8,329																**$8,329**
D5012	853162	Secondary Transformer, 113 kVA, Replace	30	25	5	1	EA	$13,708.06	$13,708						$13,708																**$13,708**
D5012	853153	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	852937	Distribution Panel, 125 AMP, Replace	30	25	5	1	EA	$5,841.92	$5,842						$5,842																**$5,842**
D5012	853150	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	853074	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	853187	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	853071	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	852900	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	852913	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	853006	Distribution Panel, 400 AMP, Replace	30	25	5	1	EA	$10,911.03	$10,911						$10,911																**$10,911**

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
D5012	852975	Distribution Panel, 400 AMP, Replace	30	25	5	1	EA	$10,911.03	$10,911						$10,911																**$10,911**
D5012	853101	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	853203	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	852987	Distribution Panel, 125 AMP, Replace	30	25	5	1	EA	$8,328.52	$8,329						$8,329																**$8,329**
D5012	853040	Distribution Panel, 125 AMP, Replace	30	25	5	1	EA	$8,328.52	$8,329						$8,329																**$8,329**
D5012	852844	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	853066	Variable Frequency Drive (VFD), 7.5 HP Motor, Replace	20	15	5	1	EA	$6,484.03	$6,484						$6,484																**$6,484**
D5012	852849	Distribution Panel, 400 AMP, Replace	30	25	5	1	EA	$10,911.03	$10,911						$10,911																**$10,911**
D5012	853011	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	852945	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	853161	Variable Frequency Drive (VFD), 10 HP Motor, Replace	20	15	5	1	EA	$7,250.70	$7,251						$7,251																**$7,251**
D5012	852962	Distribution Panel, 125 AMP, Replace	30	25	5	1	EA	$8,328.52	$8,329						$8,329																**$8,329**
D5012	853023	Distribution Panel, 125 AMP, Replace	30	25	5	1	EA	$8,328.52	$8,329						$8,329																**$8,329**
D5012	853064	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	853129	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	853046	Variable Frequency Drive (VFD), 7.5 HP Motor, Replace	20	15	5	1	EA	$6,484.03	$6,484						$6,484																**$6,484**
D5012	853036	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	852866	Distribution Panel, 225 AMP, Replace	30	25	5	1	EA	$9,143.65	$9,144						$9,144																**$9,144**
D5012	852899	Distribution Panel, 125 AMP, Replace	30	25	5	1	EA	$5,841.92	$5,842						$5,842																**$5,842**
D5012	853188	Distribution Panel, 400 AMP, Replace	30	25	5	1	EA	$10,911.03	$10,911						$10,911																**$10,911**
D5012	853084	Variable Frequency Drive, 20 HP, Replace	20	14	6	1	EA	$10,557.23	$10,557							$10,557															**$10,557**
D5012	853126	Switchgear, 600 AMP, Replace	30	23	7	1	EA	$186,779.53	$186,780								$186,780														**$186,780**
D5012	852859	Variable Frequency Drive (VFD), 20 HP Motor, Replace	20	13	7	1	EA	$10,557.23	$10,557								$10,557														**$10,557**
D5012	852872	Variable Frequency Drive, 15 HP, Replace	20	13	7	1	EA	$9,250.35	$9,250								$9,250														**$9,250**
D5012	853196	Variable Frequency Drive, 5 HP, Replace	20	13	7	1	EA	$5,461.30	$5,461								$5,461														**$5,461**
D5012	852896	Distribution Panel, 225 AMP, Replace	30	18	12	1	EA	$9,143.65	$9,144													$9,144									**$9,144**
D5012	853052	Distribution Panel, 225 AMP, Replace	30	18	12	1	EA	$9,143.65	$9,144													$9,144									**$9,144**
D5012	853147	Distribution Panel, 400 AMP, Replace	30	18	12	1	EA	$12,882.32	$12,882													$12,882									**$12,882**
D5012	853160	Distribution Panel, 60 AMP, Replace	30	18	12	1	EA	$5,841.92	$5,842													$5,842									**$5,842**
D5012	852977	Motor Control Center, 600 AMP, Replace	30	18	12	1	EA	$30,218.52	$30,219													$30,219									**$30,219**
D5012	858837	Secondary Transformer, Dry, 10 kVA, Replace	30	18	12	1	EA	$6,094.44	$6,094													$6,094									**$6,094**
D5012	852852	Distribution Panel, 225 AMP, Replace	30	18	12	1	EA	$9,143.65	$9,144													$9,144									**$9,144**
D5012	853128	Distribution Panel, 400 AMP, Replace	30	18	12	1	EA	$12,882.32	$12,882													$12,882									**$12,882**
D5012	852988	Distribution Panel, 100 AMP, Replace	30	18	12	1	EA	$5,841.92	$5,842													$5,842									**$5,842**
D5012	853121	Secondary Transformer, Dry, 225 kVA, Replace	30	18	12	1	EA	$19,589.91	$19,590													$19,590									**$19,590**
D5012	853122	Secondary Transformer, 225 kVA, Replace	30	18	12	1	EA	$19,589.91	$19,590													$19,590									**$19,590**
D5012	853002	Distribution Panel, 225 AMP, Replace	30	18	12	1	EA	$9,143.65	$9,144													$9,144									**$9,144**
D5012	852889	Distribution Panel, 150 AMP, Replace	30	18	12	1	EA	$5,841.92	$5,842													$5,842									**$5,842**
D5012	853051	Secondary Transformer, 15 kVA, Replace	30	18	12	1	EA	$6,273.19	$6,273													$6,273									**$6,273**
D5012	852936	Secondary Transformer, 75 kVA, Replace	30	18	12	1	EA	$10,171.69	$10,172													$10,172									**$10,172**
D5012	852984	Secondary Transformer, 75 kVA, Replace	30	18	12	1	EA	$10,171.69	$10,172													$10,172									**$10,172**
D5012	853108	Secondary Transformer, 75 kVA, Replace	30	18	12	1	EA	$10,171.69	$10,172													$10,172									**$10,172**
D5012	852991	Secondary Transformer, 45 kVA, Replace	30	18	12	1	EA	$7,886.62	$7,887													$7,887									**$7,887**
D5012	853003	Distribution Panel, 600 AMP, Replace	30	18	12	1	EA	$14,657.01	$14,657													$14,657									**$14,657**
D5012	852897	Variable Frequency Drive (VFD), 7.5 HP Motor, Replace	20	7	13	1	EA	$6,484.03	$6,484														$6,484								**$6,484**
D5012	853050	Variable Frequency Drive (VFD), 7.5 HP Motor, Replace	20	7	13	1	EA	$6,484.03	$6,484														$6,484								**$6,484**
D5012	858839	Secondary Transformer, Dry, 15 kVA, Replace	30	16	14	1	EA	$6,273.19	$6,273															$6,273							**$6,273**
D5012	853069	Distribution Panel, 100 AMP, Replace	30	15	15	1	EA	$5,841.92	$5,842																$5,842						**$5,842**
D5012	852858	Distribution Panel, 250 AMP, Replace	30	11	19	1	EA	$9,143.65	$9,144																				$9,144		**$9,144**
D5012	852886	Secondary Transformer, 15 kVA, Replace	30	10	20	1	EA	$6,273.19	$6,273																					$6,273	**$6,273**
D5022	858830	LED Lighting Fixture, Basic, 11 W, Replace	20	10	10	34	EA	$207.22	$7,045											$7,045											**$7,045**
D5029	853072	Lighting System, Interior, School, Upgrade	25	21	4	404187	SF	$17.66	$7,139,559				$7,139,559																		**$7,139,559**
D5029	853152	Lighting System, Interior, School, Upgrade	25	21	4	1000	SF	$33.02	$33,024				$33,024																		**$33,024**
D5032	946243	Intercom Master Station, Replace	20	19	1	1	EA	$4,386.68	$4,387		$4,387																				**$4,387**
D5032	853048	Intercom Speaker, , Replace	20	17	3	397	EA	$661.35	$262,557				$262,557																		**$262,557**
D5032	858306	Intercom Master Station, Install	20	0	20	1	EA	$4,386.68	$4,387																					$4,387	**$4,387**
D5036	945798	Clock and Bell System, Wireless or Ethernet Enabled, Up To 100 Total Clocks / Bells, Replace	15	14	1	405187	SF	$0.59	$237,642		$237,642																				**$475,284**
D5036	945799	Clock and Bell System, Wireless or Ethernet Enabled, Up To 100 Total Clocks / Bells, Replace	15	14	1	405187	SF	$0.59	$237,642		$237,642																				**$475,284**

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
D5036	853055	Time Control Clock, , Replace	15	12	3	10	EA	$368.21	$3,682				$3,682															$3,682			**$7,364**
D5036	852878	Time Control Clock, , Replace	15	12	3	126	EA	$368.21	$46,394				$46,394															$46,394			**$92,788**
D5037	852964	Fire Alarm Control Panel, Addressable, Replace	15	10	5	1	EA	$23,342.23	$23,342						$23,342															$23,342	**$46,684**
D5037	853094	Fire Alarm System, School, Install	20	11	9	405187	SF	$3.60	$1,458,471										$1,458,471												**$1,458,471**
D5038	852846	Security/Surveillance System, Cameras and CCTV, Install	10	5	5	405187	SF	$5.00	$2,026,948						$2,026,948										$2,026,948						**$4,053,896**
D5092	853195	Exit Lighting Fixture, w/ Battery, Replace	10	5	5	95	EA	$481.79	$45,770						$45,770										$45,770						**$91,541**
D5092	858820	Generator, Diesel, 65 to 125 kW, Replace	25	18	7	1	EA	$131,095.65	$131,096								$131,096														**$131,096**
E1027	853198	Laboratory Exhaust Hood, 4 LF, Replace	15	15	0	1	EA	$3,028.95	$3,029	$3,029															$3,029						**$6,058**
E1027	853148	Sink, Epoxy Resin, Laboratory, Replace	15	9	6	90	EA	$746.93	$67,223							$67,223															**$67,223**
E1028	853070	Defibrillator, Cabinet Mounted, Replace	5	2	3	7	EA	$1,620.93	$11,346				$11,346					$11,346					$11,346					$11,346			**$45,386**
E1093	853120	Commercial Kitchen, Kiln, Replace	20	20	0	1	EA	$25,806.00	$25,806	$25,806																				$25,806	**$51,612**
E1093	852995	Commercial Kitchen, Tilting Skillet, Replace	20	20	0	1	EA	$25,806.00	$25,806	$25,806																				$25,806	**$51,612**
E1093	853025	Commercial Kitchen, Kiln, Replace	20	20	0	1	EA	$25,806.00	$25,806	$25,806																				$25,806	**$51,612**
E1093	852949	Commercial Kitchen, Convection Oven, Double, Replace	10	7	3	1	EA	$9,939.45	$9,939				$9,939										$9,939								**$19,879**
E1093	853173	Commercial Kitchen, Freezer, 2-Door Reach-In, Replace	15	12	3	1	EA	$5,340.60	$5,341				$5,341															$5,341			**$10,681**
E1093	852954	Commercial Kitchen, Refrigerator, 2-Door Reach-In, Replace	15	12	3	1	EA	$4,894.40	$4,894				$4,894															$4,894			**$9,789**
E1093	852994	Commercial Kitchen, Refrigerator, 1-Door Reach-In, Replace	15	12	3	1	EA	$2,892.25	$2,892				$2,892															$2,892			**$5,785**
E1093	852923	Commercial Kitchen, Griddle, Replace	15	11	4	1	EA	$7,295.60	$7,296					$7,296															$7,296		**$14,591**
E1093	853021	Commercial Kitchen, Food Warmer, Replace	15	11	4	1	EA	$1,784.70	$1,785					$1,785															$1,785		**$3,569**
E1093	852946	Commercial Kitchen, Food Warmer, Replace	15	11	4	1	EA	$1,784.70	$1,785					$1,785															$1,785		**$3,569**
E1093	853019	Commercial Kitchen, Food Warmer, Replace	15	11	4	1	EA	$1,784.70	$1,785					$1,785															$1,785		**$3,569**
E1093	853095	Commercial Kitchen, Dishwasher, Replace	10	6	4	1	EA	$22,611.09	$22,611					$22,611										$22,611							**$45,222**
E1093	852902	Commercial Kitchen, Garbage Disposal, 1 to 3 HP, Replace	15	11	4	1	EA	$3,949.35	$3,949					$3,949															$3,949		**$7,899**
E1093	852863	Commercial Kitchen, Freezer, 2-Door Reach-In, Replace	15	11	4	1	EA	$5,340.60	$5,341					$5,341															$5,341		**$10,681**
E1093	853029	Commercial Kitchen, Walk-In Freezer, Replace	20	16	4	1	EA	$25,664.71	$25,665					$25,665																	**$25,665**
E1093	853085	Commercial Kitchen, Garbage Disposal, 1 to 3 HP, Replace	15	11	4	1	EA	$3,949.35	$3,949					$3,949															$3,949		**$7,899**
E1093	853163	Commercial Kitchen, Salad Table, Replace	15	11	4	1	EA	$4,947.25	$4,947					$4,947															$4,947		**$9,895**
E1093	852885	Commercial Kitchen, Refrigerator, 1-Door Reach-In, Replace	15	11	4	1	EA	$2,892.25	$2,892					$2,892															$2,892		**$5,785**
E1093	853132	Commercial Kitchen, Griddle, Replace	15	11	4	1	EA	$7,295.60	$7,296					$7,296															$7,296		**$14,591**
E1093	853098	Commercial Kitchen, Refrigerator, 1-Door Reach-In, Replace	15	11	4	1	EA	$2,892.25	$2,892					$2,892															$2,892		**$5,785**
E1093	852847	Commercial Kitchen, Icemaker, Freestanding, Replace	15	11	4	1	EA	$7,036.33	$7,036					$7,036															$7,036		**$14,073**
E1093	852888	Commercial Kitchen, Food Warmer, Replace	15	11	4	1	EA	$1,784.70	$1,785					$1,785															$1,785		**$3,569**
E1093	853175	Commercial Kitchen, Freezer, 1-Door Reach-In, Replace	15	11	4	1	EA	$3,263.70	$3,264					$3,264															$3,264		**$6,527**
E1093	852893	Commercial Kitchen, Freezer, 2-Door Reach-In, Replace	15	11	4	1	EA	$5,340.60	$5,341					$5,341															$5,341		**$10,681**
E1093	853151	Commercial Kitchen, Convection Oven, Double, Replace	10	6	4	1	EA	$9,939.45	$9,939					$9,939										$9,939							**$19,879**
E1093	853008	Commercial Kitchen, Convection Oven, Single, Replace	10	6	4	1	EA	$5,839.26	$5,839					$5,839										$5,839							**$11,679**
E1093	853037	Commercial Kitchen, Convection Oven, Single, Replace	10	6	4	1	EA	$5,839.26	$5,839					$5,839										$5,839							**$11,679**
E1093	853018	Commercial Kitchen, Icemaker, Freestanding, Replace	15	11	4	1	EA	$7,036.33	$7,036					$7,036															$7,036		**$14,073**
E1093	853001	Commercial Kitchen, Refrigerator, 2-Door Reach-In, Replace	15	11	4	1	EA	$4,894.40	$4,894					$4,894															$4,894		**$9,789**
E1093	853136	Commercial Kitchen, Food Warmer, Replace	15	11	4	1	EA	$1,784.70	$1,785					$1,785															$1,785		**$3,569**
E1093	853205	Commercial Kitchen, Icemaker, Freestanding, Replace	15	11	4	1	EA	$7,036.33	$7,036					$7,036															$7,036		**$14,073**
E1093	853058	Commercial Kitchen, Freezer, 2-Door Reach-In, Replace	15	11	4	1	EA	$5,340.60	$5,341					$5,341															$5,341		**$10,681**
E1093	852862	Commercial Kitchen, Deep Fryer, Replace	15	11	4	1	EA	$7,322.05	$7,322					$7,322															$7,322		**$14,644**
E1093	853024	Commercial Kitchen, Deep Fryer, Replace	15	11	4	1	EA	$7,322.05	$7,322					$7,322															$7,322		**$14,644**
E1093	852955	Commercial Kitchen, Convection Oven, Double, Replace	10	6	4	1	EA	$9,939.45	$9,939					$9,939										$9,939							**$19,879**
E1093	852992	Commercial Kitchen, Dishwasher, Replace	10	6	4	1	EA	$22,611.09	$22,611					$22,611										$22,611							**$45,222**
E1093	852989	Commercial Kitchen, Refrigerator, 1-Door Reach-In, Replace	15	10	5	1	EA	$2,892.25	$2,892						$2,892															$2,892	**$5,785**
E1093	852875	Commercial Kitchen, Mixer, Tabletop, Replace	20	15	5	1	EA	$3,507.50	$3,508						$3,508																**$3,508**
E1093	852983	Commercial Kitchen, Refrigerator, 1-Door Reach-In, Replace	15	10	5	1	EA	$2,892.25	$2,892						$2,892															$2,892	**$5,785**
E1093	852882	Commercial Kitchen, Icemaker, Freestanding, Replace	15	10	5	1	EA	$7,036.33	$7,036						$7,036															$7,036	**$14,073**
E1093	853197	Commercial Kitchen, Refrigerator, 1-Door Reach-In, Replace	15	10	5	1	EA	$2,892.25	$2,892						$2,892															$2,892	**$5,785**
E1093	853110	Commercial Kitchen, Food Warmer, Replace	15	10	5	1	EA	$1,784.70	$1,785						$1,785															$1,785	**$3,569**
E1093	853016	Commercial Kitchen, Food Warmer, Replace	15	10	5	1	EA	$1,784.70	$1,785						$1,785															$1,785	**$3,569**
E1093	853031	Commercial Kitchen, Range, 2-Burner, Replace	15	10	5	1	EA	$1,780.20	$1,780						$1,780															$1,780	**$3,560**
E1093	852915	Commercial Kitchen, Kiln, Replace	20	15	5	1	EA	$25,806.00	$25,806						$25,806																**$25,806**
E1093	853117	Commercial Kitchen, Convection Oven, Single, Replace	10	5	5	1	EA	$5,839.26	$5,839						$5,839											$5,839						**$11,679**
E1093	853202	Commercial Kitchen, Food Warmer, Replace	15	10	5	1	EA	$1,784.70	$1,785						$1,785															$1,785	**$3,569**
E1093	853000	Commercial Kitchen, Kiln, Replace	20	14	6	1	EA	$25,806.00	$25,806							$25,806															**$25,806**

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
E1093	852960	Commercial Kitchen, Freezer, 1-Door Reach-In, Replace	15	9	6	1	EA	$3,263.70	$3,264							$3,264															**$3,264**
E1093	853083	Commercial Kitchen, Walk-In Refrigerator, Replace	20	13	7	1	EA	$14,093.25	$14,093								$14,093														**$14,093**
E1094	852906	Residential Appliances, Refrigerator, 14-18 CF, Replace	15	12	3	7	EA	$1,099.45	$7,696				$7,696															$7,696			**$15,392**
E1094	852990	Residential Appliances, Garbage Disposal, Replace	10	7	3	7	EA	$339.25	$2,375				$2,375										$2,375								**$4,750**
E1094	853039	Residential Appliances, Clothes Washer/Dryer Combo Unit, Replace	15	12	3	1	EA	$1,756.18	$1,756				$1,756															$1,756			**$3,512**
E1094	852941	Residential Appliances, Range, Gas, Replace	15	12	3	1	EA	$768.11	$768				$768															$768			**$1,536**
E1094	853075	Residential Appliances, Cooktop, Countertop, Replace	15	12	3	6	EA	$983.07	$5,898				$5,898															$5,898			**$11,797**
E1094	853199	Residential Appliances, Range Hood, Vented or Ventless, Replace	15	11	4	1	EA	$271.61	$272					$272															$272		**$543**
E1094	853156	Residential Fixtures, Ceiling Fan, Replace	15	10	5	4	EA	$407.23	$1,629						$1,629															$1,629	**$3,258**
E1099	852919	Bleacher, Telescoping Power Operated, to 15 Tier, Replace	20	17	3	500	EA	$454.25	$227,125				$227,125																		**$227,125**
E1099	853044	Bleacher, Auditorium seating, Replace	20	13	7	500	EA	$287.50	$143,750								$143,750														**$143,750**
E2012	853099	Kitchen Cabinet, Base and Wall Section, Wood, Replace	20	17	3	62	LF	$537.77	$33,342				$33,342																		**$33,342**
F1029	958695	Davis Bacon Prevailing Wages, Surcharge for Prevailing Wages, 10% surcharge for prevailing wages	1	1	0	364660.83	LS	$1.15	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	$419,360	**$8,806,559**
F1041	853143	Swimming Pool Diving Board, , Replace	20	17	3	2	EA	$3,831.82	$7,664				$7,664																		**$7,664**
F1041	853142	Swimming Pool Plaster, , Refinish	15	12	3	1000	SF	$6.44	$6,440				$6,440															$6,440			**$12,880**
G2022	858853	Parking Lots, Asphalt Pavement, Cut & Patch	25	24	1	4500	SF	$5.70	$25,668		$25,668																				**$25,668**
G2022	860028	Parking Lots, Asphalt Pavement, Seal & Stripe	5	2	3	200000	SF	$0.44	$87,400				$87,400					$87,400					$87,400					$87,400			**$349,600**
G2022	858852	Parking Lots, Asphalt Pavement, Mill & Overlay	25	21	4	200000	SF	$3.77	$754,400					$754,400																	**$754,400**
G2031	858829	Pedestrian Pavement, Sidewalk, Clay Brick/Masonry Pavers, Replace	30	22	8	5200	SF	$39.23	$203,971									$203,971													**$203,971**
G2031	858847	Pedestrian Pavement, Sidewalk, Concrete Large Areas, Replace	30	13	17	40000	SF	$10.35	$414,000																		$414,000				**$414,000**
G2035	858809	Exterior Stairs & Ramps, Handrails, Metal, Replace	25	18	7	75	LF	$57.50	$4,313								$4,313														**$4,313**
G2041	858828	Fences & Gates, Chain Link, 8' High, Replace	30	18	12	24000	LF	$61.99	$1,487,640													$1,487,640									**$1,487,640**
G2042	858813	Retaining Wall, Treated Timber (per SF Face), Replace	40	28	12	1600	SF	$16.44	$26,302													$26,302									**$26,302**
G2042	858851	Retaining Wall, Brick/Stone (per SF Face), Replace	40	20	20	1200	SF	$150.20	$180,244																					$180,244	**$180,244**
G2044	858836	Signage, Property, Monument/Pylon, Replace	20	8	12	1	EA	$9,892.30	$9,892													$9,892									**$9,892**
G2045	858826	Site Furnishings, Park Bench, Metal/Wood/Plastic, Replace	20	15	5	22	EA	$560.08	$12,322						$12,322																**$12,322**
G2045	852978	Site Furnishings, Wood Bench, Replace	20	13	7	45	EA	$560.08	$25,204								$25,204														**$25,204**
G2045	858842	Site Furnishings, Picnic Table, Plastic-Coated Metal, Replace	20	8	12	7	EA	$1,600.23	$11,202													$11,202									**$11,202**
G2047	852870	Sports Apparatus, Scoreboard, Replace	20	17	3	6	EA	$24,272.51	$145,635				$145,635																		**$145,635**
G2047	852914	Sports Apparatus, Basketball Backstop, Replace	10	5	5	13	EA	$10,850.99	$141,063						$141,063										$141,063						**$282,126**
G2047	945527	Play Surfaces, Artificial Turf, 1/2" Pile, 5/16" Pad, Replace	20	13	7	160000	SF	$11.51	$1,841,840								$1,841,840														**$1,841,840**
G2047	858807	Play Surfaces & Sports Courts, Asphalt, Replace	25	18	7	46000	SF	$6.79	$312,110								$312,110														**$312,110**
G2047	858841	Sports Apparatus, Scoreboard, Replace	20	13	7	4	EA	$24,272.51	$97,090								$97,090														**$97,090**
G2047	858815	Sports Apparatus, Bleachers, Steel Frame w/ Aluminum Seats, Replace	25	18	7	250	EA	$226.55	$56,638								$56,638														**$56,638**
G2047	858816	Sports Apparatus, Bleachers, Steel Frame w/ Aluminum Seats, Replace	25	13	12	300	EA	$226.55	$67,965													$67,965									**$67,965**
G2047	945526	Play Surfaces & Sports Courts, Poured-in-place Rubber, Replace	20	5	15	58000	SF	$25.30	$1,467,400																$1,467,400						**$1,467,400**
G2048	858855	Flagpole, Metal, Replace	20	10	10	1	EA	$2,909.50	$2,910												$2,910										**$2,910**
G4021	858819	Pole Light, Exterior, 105 to 200 W LED (Fixture & Bracket Arm Only), Replace	20	16	4	29	EA	$3,798.45	$110,155					$110,155																	**$110,155**
G4021	858812	Pole Light, Exterior, 135 to 1000 W HID (Fixture, Ballast, & Lamp), Replace	10	5	5	65	EA	$2,583.94	$167,956						$167,956										$167,956						**$335,912**
G4021	858835	Pole Light, Exterior, 105 to 200 W LED (Fixture & Bracket Arm Only), Replace	20	8	12	39	EA	$3,798.45	$148,140													$148,140									**$148,140**
P000X	854609	Architect/Engineer, Building Envelope, Masonry, Evaluate/Report	0	0	0	1	EA	$7,475.00	$7,475	$7,475																					**$7,475**
Totals, Unescalated										**$529,739**	**$4,056,102**	**$419,360**	**$7,776,917**	**$13,180,837**	**$5,652,155**	**$1,099,435**	**$5,298,464**	**$857,560**	**$2,307,504**	**$502,415**	**$927,959**	**$11,310,072**	**$1,317,702**	**$893,007**	**$4,420,497**	**$894,644**	**$1,316,546**	**$1,584,285**	**$2,913,429**	**$1,335,411**	**$68,594,040**
Totals, Escalated (3.0% inflation, compounded annually)										**$529,739**	**$4,177,785**	**$444,899**	**$8,498,048**	**$14,835,148**	**$6,552,397**	**$1,312,783**	**$6,516,442**	**$1,086,331**	**$3,010,769**	**$675,204**	**$1,284,512**	**$16,125,459**	**$1,935,090**	**$1,350,754**	**$6,886,990**	**$1,435,641**	**$2,176,051**	**$2,697,139**	**$5,108,715**	**$2,411,901**	**$89,051,796**

* Markup/LocationFactor (1) has been included in unit costs. Markup includes a and 15% Ann Arbor Premium factors applied to the location adjusted unit cost.

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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:	2727 Fuller Road, Ann Arbor, MI 48105
Year Constructed/Renovated:	1969
Current Occupants:	Ann Arbor Public Schools
Percent Utilization:	100%
Management Point of Contact:	Bernie Rice 734.249.1244 phone
Property Type:	High School
Site Area:	55.50 acres
Building Area:	405,187 SF
Number of Buildings:	1
Number of Stories:	3
Parking Type and Number of Spaces:	532 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 & Air Conditioning:	Central system with boilers, chillers, air handlers, and cooling tower. Supplemental components: suspended unit heaters, and condensing unit.
Fire and Life/Safety:	Fire sprinklers, hydrants, smoke detectors, alarms, strobes, extinguishers, pull stations, alarm panel, and exit signs.
ADA :	This building does not have any major ADA issues.
All 405,187 square feet of the building are occupied by a single occupant, Ann Arbor Public Schools. The spaces are mostly a combination of offices, classrooms, supporting restrooms, mechanical and other utility spaces. The following table identifies the unit types and mix at the subject property:	

Unit Types and Mix
Most sample of the interior spaces were observed in order to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, exterior of the property and the roof. Areas of note that were either inaccessible or not observed for other reasons are listed in the table below:

Key Spaces Not Observed		
Room Number	Area	Access Issues
Roof	Roof	Safety concerns due to 14 inches of snow.
Elevator rooms	Elevator rooms	Locked and no keys available.
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.		

Property Information	
Assessment Information	
Dates of Visit:	February 12, February 13, & February 14
On-Site Point of Contact (POC):	Dr. Schwamb & Antonia
Assessment and Report Prepared by:	Tammy Prusa
Reviewed by:	Al Diefert Technical Report Reviewer For Andrew Hupp Program Manager ahupp@emgcorp.com 800.733.0660 x6632

1.2. Key Findings

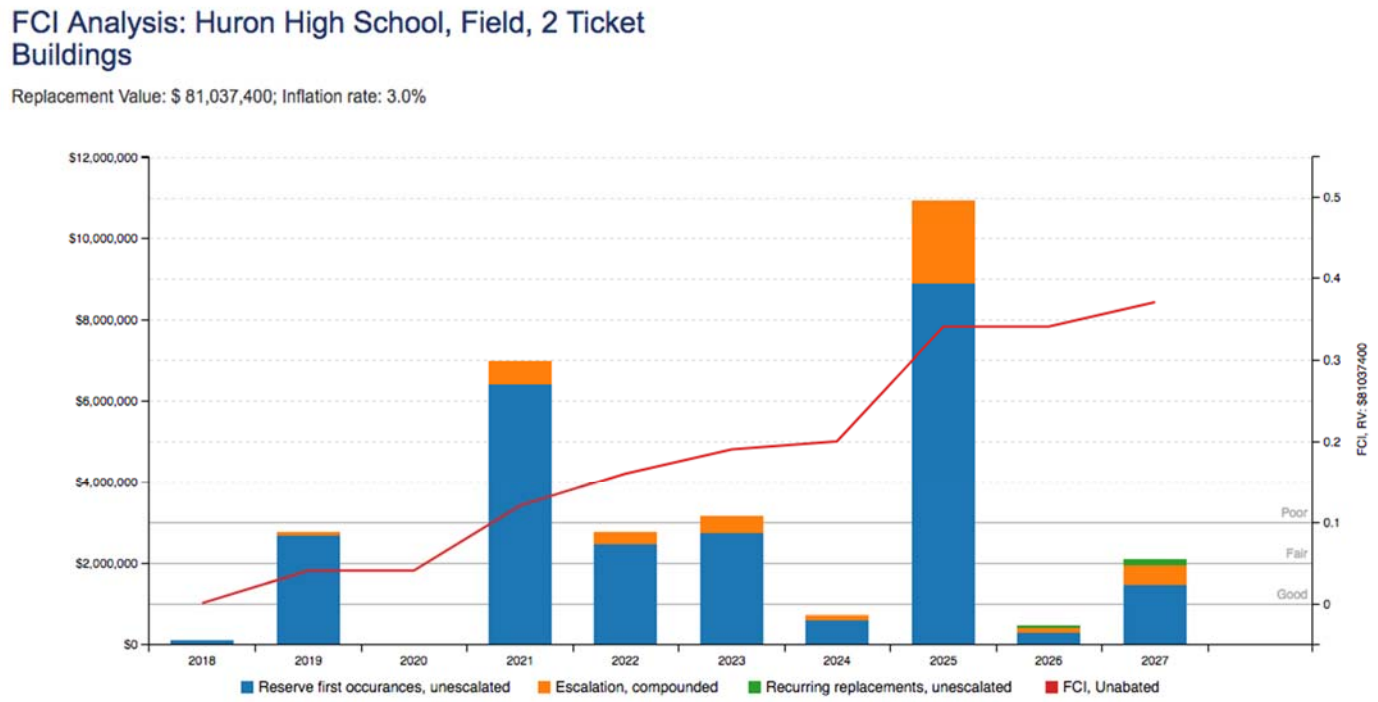
Site : Rust stains throughout the hallway leading to the swimming pool area was observed during the site visit.

The concrete wall is in poor condition. Rust stains throughout the hallway leading to the swimming pool area was observed during the site visit. 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 concrete wall is also included in the cost tables. Cut and patch asphalt parking lot due to potholes observed during site visit. Per Principal replace windows throughout building due to windows leaking. Per principal replace doors throughout building as they are rotting and leaking. Paint exterior front entrance handrail due to rust.

Architectural: Per the POC the roof leaks throughout the building. Repair damaged acoustic tiles thoughout building and Clinic Room 2 due to water damage. Repair vinyl tile in Clinic Room 2 due to raising and cracking. Repair gypsum board wall in Testing Room due to cracks observed during site visit. Paint concrete walls throughout building due to age, cracking, and graffiti located in locker rooms. Repair concrete wall in Room 115 due to hole observed during site visit. Repoint brick veneer in Principal's Office due to crack observed during site visit. Replace lockers in locker rooms due to rust and damage throughout. Replace carpeting in 21 (special needs) due to isolated areas of unsanitary carpet where the children have numerously soiled the carpet.

MEPF : The vast majority of the building is not protected by fire suppression; sprinkler heads are currently limited to the gymnasium area. 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.

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):	0.12%
Current Year FCI Rating:	2018
10-Year Facility Condition Index (FCI) FCI = (RR)/(CRV):	36.96%
10-Year FCI Rating	0.37
Current Replacement Value (CRV):	$81,037,400
Year 0 (Current Year) - Immediate Repairs (IR):	$96,109
Years 1-10 - Replacement Reserves (RR):	$29,851,818
Total Capital Needs:	$29,947,927

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	--	--
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	Fair
Building Interior Stairs	Concrete stairs	Closed	Metal	Metal	Fair

Anticipated Lifecycle Replacements:

- Exterior metal handrail
- Interior metal rails

Actions/Comments:

- The metal handrails have isolated evidence of rusted handrails at the front entrance of the building. The damaged handrails must be replaced.

3. Building Envelope

B20 Exterior Vertical Enclosures

B2010 Exterior Walls		
Type	Location	Condition
Primary Finish	Brick veneer	Fair
Secondary Finish	--	--
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:

- Brick veneer repointing

Actions/Comments:

- No significant actions are identified at the present time. On-going periodic maintenance, including patching repairs, graffiti removal, and re-caulking, is highly recommended. Future lifecycle replacements of the components listed above will be required.

B2020 Exterior Windows				
Window Framing	Glazing	Location	Window Screen	Condition
Aluminum framed, fixed	Single glaze	Exterior wall	☐	Poor

B2050 Exterior Doors		
Main Entrance Doors	Door Type	Condition
	Metal, insulated	Poor
Secondary Entrance Doors	Metal, insulated	Poor
Service Doors	Metal, insulated	Poor

B2050 Exterior Doors		
Main Entrance Doors	Door Type	Condition
	Metal, insulated	Poor
Overhead Doors	Aluminium	Fair

Anticipated Lifecycle Replacements:

- Windows
- Exterior steel doors
- Exterior aluminum swinging doors
- Overhead doors

Actions/Comments:

- According to the principal of the building, the windows display significant evidence of leaks throughout the building. The damaged windows must be replaced.
- According to the principal of the building, the doors display significant evidence of leaks and rotting throughout the exterior of the building. The damaged doors must be replaced.

B3010 Primary Roof			
Location	Throughout building	Finish	Single-ply membrane
Type / Geometry	Flat	Roof Age	19 Yrs
Flashing	Membrane	Warranties	None
Parapet Copings	None	Roof Drains	Internal drains
Fascia	None	Insulation	Rigid Board
Soffits	None	Skylights	No
Attics	--	Ventilation Source-1	--
Roof Condition	Poor	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	☐

Degradation Issues			
Observation	Exists At Site	Observation	Exists At Site
Other	☒	Other	☐

Anticipated Lifecycle Replacements:

- Single-ply EPDM membrane

Actions/Comments:

- The roof finishes are original. Information regarding roof warranties or bonds was not available. The roofs are maintained by an outside contractor.
- 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.
- Roof leaks have occurred within the past year, and the leaks remain active. The leaks occur throughout the building. All active leaks must be repaired.

4. Interiors

C10 Interior Construction

C1030 Interior Doors		
Item	Type	Condition
Interior Doors	Solid core wood	Fair
Door Framing	Wood	Fair
Fire Doors	No	--
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	☐

The following table generally describes the locations and typical conditions of the interior finishes within the facility:

Interior Finishes - HURON HIGH SCHOOL, FIELD, 2 TICKET BUILDINGS

Location	Finishes		Quantity (SF)	Condition	Action	RUL	Est. Cost
Throughout building	Wall	Gypsum Board/Plaster/Metal	316046	Fair	Prep & Paint	4	449,797
Restroom	Wall	Ceramic Tile	40519	Fair	Replace	7	670,752
Classroom	Wall	Acoustical Tile (ACT)	8104	Fair	Replace	3	61,346
Throughout building	Wall	Concrete/Masonry	300000	Fair	Prep & Paint	3	435,300
Auditorium stage	Floor	Wood Strip	750	Fair	Sand & Refinish	4	2,758
Gymnasium	Floor	Maple Sports Floor	8104	Fair	Sand & Refinish	5	36,743
Swimming Pool & Restroom:	Floor	Ceramic Tile	20259	Fair	Replace	12	319,181
Kitchen	Floor	Quarry Tile	4052	Fair	Replace	17	61,540
Throughout building	Floor	Vinyl Tile (VCT)	162075	Fair	Replace	3	778,057
Throughout building	Floor	Terrazzo	129660	Fair	Replace	19	1,563,142
Classroom	Floor	Carpet Standard-Commercial Medium-Traffic	81037	Fair	Replace	3	588,029
Throughout building	Ceiling	Gypsum Board/Plaster	162075	Fair	Prep & Paint	4	313,874
Throughout building	Ceiling	Suspended Acoustical Tile (ACT)	243112	Fair	Replace	7	756,321

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:

- Scoreboard
- Acoustic tile
- Toilet partitions
- Refrigerator
- Overhead door
- Repair concrete wall
- Steel doors
- Wood hollow-core doors
- Repoint brick veneer
- Repair gypsum board
- Clocks
- Garbage disposal
- Quarry tile
- Combo unit washer/dryer
- Interior paint
- Steel doors w/safety glass
- Ceramic tile
- Carpet
- Basketball backstop
- Vinyl tile
- Bleachers
- Refinish maple sports floor
- Range
- Kitchen cabinets
- Lockers
- Terrazzo floor
- Interior park bench
- Solid-core door w/safety glass
- Cooktop
- Refinish wood strip

Actions/Comments:

- It appears that the interior finishes have not been renovated within the last ten years.
- The ceiling tiles have isolated areas of water-damaged ceiling tiles in clinic room 2 and throughout the building. The damaged ceiling tiles need to be repaired.
- There are isolated areas of water-damaged wall finishes in the pool hallway. The damaged wall areas need to be repaired.
- There are isolated areas of damaged wall finishes in the principal's office. The damaged wall areas need to be repointed.
- There are isolated areas of damaged wall finishes in the testing room. The damaged wall areas need to be repaired.
- There are significant areas of chipped and peeling concrete paint finishes throughout the building. The chipped and peeling wall areas need to be repainted.
- There are isolated areas of unsanitary carpet in room 21 (special needs) where the children have numerously soiled the carpet. The damaged carpet need to be replaced.
- There are isolated areas of damaged vinyl tile floor finishes in clinic room 2. The damaged floor areas need to be repaired.
- There are isolated areas of damaged lockers in the locker rooms. The damaged lockers need to be replaced.
- There are isolated areas of damaged wall finishes in room 115. The damaged wall areas need to be repaired.
- There are significant areas of graffiti wall finishes throughout the locker rooms and boiler rooms. The graffiti wall areas need to be repainted.
- There are isolated areas of damage to the baseboards throughout the offices areas. The cost to repair the baseboards is relatively insignificant and the work can be performed as part of the property management's routine maintenance program.

5. Services (MEPF)

D10 Conveying Systems

D1030 Vertical Conveying (Building Elevators) – Building 1			
Manufacturer	Otis	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	None		
Overhead Traction Elevators	4 cars at 2500 LB each		
Freight Elevators	None		
Machinery Condition	Fair	Controls Condition	Fair
Other Conveyances	Wheelchair Lifts	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
- Overhead traction machinery
- Wheelchair lifts

Actions/Comments:

- The elevators are serviced by outside contractor 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, and a certificate of inspection is on file in the management office
- 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	Water Heaters
Fuel	Natural gas
Boiler or Water Heater Condition	Fair
Supplementary Storage Tanks?	Yes
Adequacy of Hot Water	Adequate
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 - HURON HIGH SCHOOL, FIELD, 2 TICKET BUILDINGS

Location	Component	Component Description	Quantity	Unit	Condition	Action	RUL	Est. Cost
Boiler room	Backflow Preventer	0.75"	1	EA	Fair	Replace	4	1,010
Boiler room	Water Heater	Gas, 801 to 1,400 MBH	1	EA	Fair	Replace	8	42,853
Boiler room	Water Heater	Electric, Residential, 53 to 120 GAL	1	EA	Fair	Replace	3	2,937
Boiler room	Water Heater	Gas, Residential, 51 to 120 GAL	1	EA	Good	Replace	9	3,529
Boiler room	Water Softener	Water Storage Tank, 251 to 500 GAL	1	EA	Fair	Replace	8	4,447
Boiler room	Water Heater	Electric, Commercial, 30 to 80 GAL	1	EA	Fair	Replace	3	6,963
Classroom	Service Sink	Porcelain Enamel, Cast Iron	1	EA	Fair	Replace	8	9,522
Classroom	Emergency Eye Wash	Emergency Eye Wash	28	EA	Fair	Replace	3	39,677
Classroom	Emergency Eye Wash & Shower Station	Emergency Eye Wash & Shower Station	1	EA	Fair	Replace	3	2,115
Clinic Room 2	Water Heater	Electric, Residential, 5 to 15 GAL	1	EA	Fair	Replace	9	1,014
Hallway	Drinking Fountain	Refrigerated	27	EA	Fair	Replace	5	33,953
Hallways	Drinking Fountain	Vitreous China	16	EA	Fair	Replace	5	31,024
Kitchen	Sink	Pot, Multi-compartment	6	LF	Fair	Replace	12	7,575
Kitchen	Sink	Pot, Multi-compartment	30	LF	Fair	Replace	12	37,875
Locker rooms	Shower	Enameled Steel	93	EA	Fair	Replace	5	93,000
Mechanical closet	Service Sink	Floor	12	EA	Fair	Replace	17	19,194
Mechanical closet	Water Heater	Electric, Residential, 5 to 15 GAL	1	EA	Fair	Replace	3	1,014
Mechanical room	Urinal	Vitreous China	32	EA	Fair	Replace	9	38,190
Mechanical room	Backflow Preventer	3"	1	EA	Fair	Replace	5	4,756
Mechanical room	Backflow Preventer	2"	1	EA	Fair	Replace	4	2,603
Mechanical room	Backflow Preventer	2"	1	EA	Fair	Replace	5	2,603
Mechanical room	Water Heater	Gas, Residential, 30 to 50 GAL	1	EA	Fair	Replace	3	2,349
Mechanical room	Water Heater	Gas, Residential, 51 to 120 GAL	1	EA	Good	Replace	8	3,529
Mechanical room	Water Heater	Gas, 801 to 1,400 MBH	1	EA	Fair	Replace	8	42,853
Mechanical room	Sump Pump	20 HP	1	EA	Fair	Replace	4	7,158
Men's room ticket building	Toilet	Tankless (Water Closet)	13	EA	Fair	Replace	7	10,959
Restroom	Urinal	Vitreous China	2	EA	Failed	Replace	0	2,387
Restroom	Lavatory	Vitreous China	111	EA	Fair	Replace	10	63,565
Restroom	Toilet	Tankless (Water Closet)	117	EA	Fair	Replace	7	98,627
Throughout building	Sink	Stainless Steel	1	EA	Fair	Replace	7	1,054
Throughout building	Sink	Vitreous China	1	EA	Fair	Replace	8	862
Throughout building	Service Sink	Porcelain Enamel, Cast Iron	4	EA	Fair	Replace	3	5,441
Throughout building	Sink	Stainless Steel	17	EA	Fair	Replace	9	17,919
Throughout building	Sink	Plastic	3	EA	Fair	Replace	8	1,728
Ticket building	Urinal	Vitreous China	2	EA	Fair	Replace	3	3,580
Ticket building	Lavatory	Enameled Steel	8	EA	Fair	Replace	8	2,824
Ticket building	Backflow Preventer	2"	1	EA	Fair	Replace	3	2,603
Utility closet	Sump Pump	3 HP	1	EA	Fair	Replace	4	2,063

Anticipated Lifecycle Replacements:

- Distribution pumps
- Toilets
- Backflow preventers
- Sinks
- Domestic boilers
- Showers
- Water heaters
- Sump pump
- Emergency eye wash
- Water storage tank
- Drinking fountains
- Lavatories
- Emergency eye wash & shower station
- Urinals

Actions/Comments:

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

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

Building Central Heating System	
Primary Heating System Type	Hot water boilers
Heating Fuel	Natural gas
Location of Major Equipment	Mechanical rooms
Space Served by System	Entire building

Building Central Cooling System	
Primary Cooling System Type	Air-cooled chillers
Refrigerant	R-134A
Cooling Towers	Fiberglass/FRP
Location of Major Equipment	Building exterior
Space Served by System	Entire building

Distribution System	
HVAC Water Distribution System	Four-pipe
Air Distribution System	Constant
Location of Air Handlers	Mechanical rooms
Terminal Units	Radiators and/or cabinet units
Quantity and Capacity of Terminal Units	8 unit heaters
Location of Terminal Units	Along ceilings

Supplemental/Secondary Components	
Supplemental Component #1	Condensing unit
Location / Space Served by condensing unit	Computer rooms
Condensing 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 - HURON HIGH SCHOOL, FIELD, 2 TICKET BUILDINGS

Location	Component	Component Description	Quantity	Unit	Condition	Action	RUL	Est. Cost
Boiler room	Boiler	Gas, 1,001 to 2,000 MBH	1	EA	Fair	Replace	7	46,465
Boiler room	Boiler	Gas, 2,001 to 2,500 MBH	1	EA	Fair	Replace	3	54,195
Boiler room	Boiler	Gas, 1,001 to 2,000 MBH	1	EA	Fair	Replace	3	46,465
Boiler room	Boiler	Gas, 1,001 to 2,000 MBH	1	EA	Good	Replace	17	46,465
Boiler room	Boiler	Gas, 1,001 to 2,000 MBH	1	EA	Good	Replace	17	46,465
Boiler room	Boiler	Gas, 4,201 to 10,000 MBH	1	EA	Fair	Replace	3	332,867
Boiler room	Boiler	Gas, 4,201 to 10,000 MBH	1	EA	Fair	Replace	4	332,867
Boiler room	Chemical Feed System	Chemical Feed System	1	EA	Fair	Replace	7	10,642
Boiler room	Chiller	Reciprocal Water-Cooled, 201 to 300 Ton	1	EA	Fair	Replace	3	197,068
Boiler room	Exhaust Fan	Centrifugal, 25,001 to 30,000 CFM	1	EA	Fair	Replace	5	15,396
Building exterior	Cooling Tower	201 to 250 Ton	1	EA	Good	Replace	15	48,719
Building exterior	Condensing Unit/Heat Pump	Split System, 21 to 30 Ton	1	EA	Fair	Replace	4	41,340
Exterior	Chiller	Air-Cooled, 201 to 300 Ton	1	EA	Good	Replace	21	334,266
Exterior	Chiller	Air-Cooled, 201 to 300 Ton	1	EA	Good	Replace	21	367,693
Mechanical room	Air Handler	Interior, 1,301 to 2,500 CFM	1	EA	Fair	Replace	3	9,414
Mechanical room	Air Handler	Air Handler, Interior, 5,201 to 6,500 CFM, Replace	1	EA	Fair	Replace	3	22,173
Mechanical room	Air Handler	Interior, 1,301 to 2,500 CFM	1	EA	Fair	Replace	3	9,414
Mechanical room	Air Handler	Air Handler, Interior, 10,001 to 15,000 CFM, Replace	1	EA	Fair	Replace	4	41,979
Mechanical room	Air Handler	Air Handler, Interior, 10,001 to 15,000 CFM, Replace	1	EA	Fair	Replace	3	41,979
Mechanical room	Air Handler	Air Handler, Interior, 6,501 to 8,000 CFM, Replace	1	EA	Fair	Replace	3	26,017
Mechanical room	Air Handler	Interior, 1,301 to 2,500 CFM	1	EA	Fair	Replace	3	9,414
Mechanical room	Air Handler	Interior, 8,001 to 10,000 CFM	1	EA	Fair	Replace	3	31,182
Mechanical room	Air Handler	Interior, 10,001 to 15,000 CFM	1	EA	Fair	Replace	3	41,979
Mechanical room	Air Handler	Exterior, 1,201 to 2,000 CFM	1	EA	Fair	Replace	4	11,420
Mechanical room	Air Handler	Interior, 5,201 to 6,500 CFM	1	EA	Fair	Replace	7	22,173
Mechanical room	Air Handler	Interior, 50,001 to 65,000 CFM	1	EA	Fair	Replace	12	191,166
Mechanical room	Air Handler	Interior, 2,501 to 4,000 CFM	1	EA	Fair	Replace	3	13,371
Mechanical room	Boiler	Gas, 1,001 to 2,000 MBH	1	EA	Fair	Replace	7	46,465
Mechanical room	Exhaust Fan	Centrifugal, 10,001 to 16,000 CFM	1	EA	Fair	Replace	3	10,167
Mechanical room	Exhaust Fan	Centrifugal, 10,001 to 16,000 CFM	1	EA	Fair	Replace	5	10,167
Mechanical room	Exhaust Fan	Centrifugal, 5,001 to 8,000 CFM	1	EA	Fair	Replace	4	5,570
Mechanical room	Exhaust Fan	Propeller, 800 CFM	1	EA	Fair	Replace	5	1,384
Mechanical room	Exhaust Fan	Centrifugal, 3,501 to 5,000 CFM	1	EA	Fair	Replace	5	4,323
Mechanical room	Exhaust Fan	Centrifugal, 5,001 to 8,000 CFM	1	EA	Fair	Replace	4	5,570
Mechanical room	Exhaust Fan	Centrifugal, 5,001 to 8,000 CFM	1	EA	Fair	Replace	3	5,570
Mechanical room	Circulation Pump	Heating Water, 3 HP	1	EA	Fair	Replace	3	4,652
Mechanical room	Circulation Pump	Heating Water, 7.5 HP	1	EA	Fair	Replace	5	6,037
Mechanical room	Circulation Pump	Heating Water, 7.5 HP	1	EA	Fair	Replace	3	6,037
Mechanical room	Circulation Pump	Heating Water, 3 HP	1	EA	Fair	Replace	3	4,652
Mechanical room	Circulation Pump	Heating Water, 3 HP	1	EA	Fair	Replace	8	4,652
Mechanical room	Circulation Pump	Heating Water, 10 HP	1	EA	Fair	Replace	3	6,238
Mechanical room	Circulation Pump	Heating Water, 3 HP	1	EA	Fair	Replace	8	4,652
Mechanical room	Circulation Pump	Heating Water, 3 HP	1	EA	Fair	Replace	3	4,652
Mechanical room	Circulation Pump	Heating Water 5 HP	1	EA	Fair	Replace	3	5,519
Mechanical room	Circulation Pump	Heating Water, 20 to 25 HP	1	EA	Fair	Replace	3	12,425
Mechanical room	Circulation Pump	Heating Water, 20 to 25 HP	1	EA	Fair	Replace	3	12,425
Mechanical room	Circulation Pump	Heating Water, 3 HP	1	EA	Fair	Replace	3	4,652
Mechanical room	Circulation Pump	Heating Water, 10 HP	1	EA	Fair	Replace	3	6,238
Mechanical room	Circulation Pump	Heating Water, 3 HP	1	EA	Fair	Replace	5	4,652
Mechanical room	Circulation Pump	Heating Water, 10 HP	1	EA	Fair	Replace	3	6,238
Mechanical room	Circulation Pump	Chiller & Condenser Water, 12.5 to 15 HP	1	EA	Fair	Replace	3	6,861
Mechanical room	Circulation Pump	Chiller & Condenser Water, 12.5 to 15 HP	1	EA	Fair	Replace	3	6,861
Mechanical room	Circulation Pump	Chiller & Condenser Water, 60 to 75 HP	1	EA	Fair	Replace	3	31,072
Mechanical room	Circulation Pump	Chiller & Condenser Water, 60 to 75 HP	1	EA	Fair	Replace	3	31,072
Mechanical room	Circulation Pump	Chiller & Condenser Water, 12.5 to 15 HP	1	EA	Fair	Replace	3	6,861
Mechanical room	Circulation Pump	Chiller & Condenser Water, 20 to 25 HP	1	EA	Fair	Replace	3	12,425
Mechanical room	Circulation Pump	Chiller & Condenser Water, 12.5 to 15 HP	1	EA	Fair	Replace	3	6,861
Mechanical room	Circulation Pump	Chiller & Condenser Water, 12.5 to 15 HP	1	EA	Fair	Replace	3	6,861
Mechanical room	Circulation Pump	Chiller & Condenser Water, 20 to 25 HP	1	EA	Fair	Replace	3	12,425
Mechanical room	Circulation Pump	Chiller & Condenser Water, 12.5 to 15 HP	1	EA	Fair	Replace	3	6,861
Stairwell	Wall Heater	Gas w/ Electric Fan	1	EA	Failed	Replace	0	963
Stairwell	Wall Heater	Gas w/ Electric Fan	3	EA	Fair	Replace	3	2,888
Throughout building	Unit Heater	Hydronic, 8 to 12 MBH	1	EA	Fair	Replace	3	881
Throughout building	Cabinet Heater	Electric	27	EA	Fair	Replace	3	85,858
Throughout building	Unit Heater	Hydronic, 8 to 12 MBH	5	EA	Fair	Replace	7	4,404
Throughout building	Unit Heater	Hydronic, 37 to 85 MBH	2	EA	Fair	Replace	4	3,801
Throughout building	Building Automation System	HVAC Controls	405187	SF	Fair	Upgrade	3	2,172,815

Anticipated Lifecycle Replacements:

- Boilers
- Wall heaters
- Air handlers
- Air compressors
- Cabinet heaters
- Exhaust fans
- Unit heaters
- Ceiling fans
- Laboratory exhaust hood
- Condensing unit
- Chillers
- Cooling tower

Actions/Comments:

- The HVAC systems are maintained by an outside contractor. 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 were interviewed about the historical and recent performance of the equipment and systems. No chronic problems were reported and an overall sense of satisfaction with the systems was conveyed. 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.
- The plastic protecting the laboratory exhaust hoods in the science room is dangerous for the students to use and the exhaust hood in the science room does not work. The exhaust hood and plastic protection need to be replaced.

D40 Fire Protection

Item	Description					
Type	Wet pipe					
Sprinkler System	None	☐	Standpipes	☐	Backflow Preventer	☒
	Hose Cabinets	☐	Fire Pumps	☒	Siamese Connections	☒
Sprinkler System Condition	Fair					
Fire Extinguishers	Last Service Date		Servicing Current?			
	July 2017		Yes			
Hydrant Location	Adjacent street					
Siamese Location	Exterior wall					
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)	☐

Maintenance Issues			
Observation	Exists At Site	Observation	Exists At Site
Other	☐	Other	☐

Anticipated Lifecycle Replacements:

- Installation of sprinkler system
- Exit signs
- Sprinkler heads
- Defibrillator
- Fire extinguishers
- Backflow preventer

Actions/Comments:

- The vast majority of the building is not protected by fire suppression; sprinkler heads are currently limited to the gymnasium area. 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 & Panel Location	Mechanical room	Branch Wiring	Copper
Conduit	Metallic	Step-Down Transformers?	Yes
Security / Surveillance System?	Yes	Building Intercom System?	Yes
Lighting Fixtures	T-12		
Main Distribution Condition	Fair		
Secondary Panel and Transformer Condition	Fair		
Lighting Condition	Fair		

Building Emergency Systems			
Size	100 kW	Fuel	Diesel
Generator / UPS Serves	Entire building	Tank Location	Below generator
Testing Frequency	Bi-Weekly	Tank Type	Above ground storage tank
Generator / UPS 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	☐
Other	☐	Other	☐

Anticipated Lifecycle Replacements:

- Distribution panels
- Motor control centers
- Transformers
- Variable frequency drives
- Emergency generator
- Switchgear
- Lighting system
- Switchboards

Actions/Comments:

- The onsite electrical systems up to the meters are owned and maintained by the respective utility company.
- The electrical service and capacity appear to be adequate for the property's demands.
- The panels, switchboards, and step-down transformers are mostly original components. The electrical service appears to be adequate for the facility's needs. However, due to the age of the panels, switchboards, and step-down transformers and increasing difficulty of obtaining replacement parts over time, lifecycle replacements are recommended per above.

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	☒

D7010 Access Control and Intrusion Detection / D7050 Detection and Alarm						
Item	Description					
	Annunciator Panels	☒	Hard-Wired Smoke Detectors	☐	Strobe Light Alarms	☒
	Pull Stations	☒	Emergency Battery-Pack Lighting	☒	Illuminated EXIT Signs	☐
Fire Alarm System Condition	Fair					
Central Alarm Panel System	Location of Alarm Panel		Installation Date of Alarm Panel			
	General Office		2008			

Anticipated Lifecycle Replacements:

- Central alarm panel
- Installation of intercom station
- Intercom speakers
- Security surveillance
- Fire alarm system

Actions/Comments:

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

6. Equipment & Furnishings

E10 Equipment

The cafeteria 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, Up-right, Under-counter	Fair
Ranges	Gas	Fair
Ovens	Gas	Fair
Griddles / Grills	Gas	Fair
Fryers	Electric	Fair
Hood	Exhaust ducted to exterior	Fair
Dishwasher	Owned	Fair
Microwave	☐	--
Ice Machines	☒	Fair
Steam Tables	☐	--
Work Tables	☒	Fair
Shelving	☐	--

E1030 Commercial Laundry		
Equipment	Comment	Condition
Commercial Washing Machines	None	--
Commercial Dryers	None	--
Residential Washers	☒	Fair
Residential Dryers	☒	Fair

Anticipated Lifecycle Replacements:

- Convection ovens
- Dishwashers
- Walk-in freezer
- Walk-in cooler
- Ice makers
- Griddles

- Kilns
- 1-door reach-in refrigerators
- 2-door reach-in freezers
- Food warmers
- 2-door reach-in refrigerators
- Garbage disposals
- Salad tables
- Mixer
- Icemakers
- 1-door reach-in freezers
- Deep fryers
- Range 2-burner

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.

7. Sitework

G20 Site Improvements

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

Parking Count				
Open Lot	Carport	Private Garage	Subterranean Garage	Freestanding Parking Structure
532	--	--	--	--
Total Number of ADA Compliant Spaces			18	
Number of ADA Compliant Spaces for Vans			18	
Total Parking Spaces			532	

Site Stairs			
Location	Material	Handrails	Condition
Front entrance	Concrete stairs	Metal	Fair

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:

- Parking lot asphalt mill & overlay
- Parking lot asphalt seal & coating
- Parking lots asphalt cut & patch
- Sidewalks

Actions/Comments:

- The asphalt pavement exhibits isolated areas of failure and deterioration, such as alligator cracking. The most severely damaged areas of paving must be cut and patched in order to maintain the integrity of the overall pavement system. Complete milling and overlay of the entire lot is also recommended.

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

Site Fencing		
Type	Location	Condition
Chain link with metal posts	Throughout site	Fair

Refuse Disposal				
Refuse Disposal	Common area dumpsters			
Dumpster Locations	Mounting	Enclosure	Contracted?	Condition
Right elevation of building	Asphalt paving	None	Yes	Fair

Other Site Amenities			
	Description	Location	Condition
Playground Equipment	None	--	--
Tennis Courts	Asphalt	Left elevation of building	Fair
Basketball Court	None	--	--

Other Site Amenities			
	Description	Location	Condition
Swimming Pool	Yes	Interior rear elevation of building	Fair

The tennis 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:

- Diving boards
- Swimming pool plaster
- Signage
- Picnic tables
- Asphalt play surfaces
- Park benches
- Fences
- Bleachers
- Scoreboards
- Flagpoles

Actions/Comments:

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

G2080 Landscaping		
Drainage System and Erosion Control		
System	Exists At Site	Condition
Surface Flow	☐	--
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
Timber	Left elevation of building	Fair
Keystone	Throughout site	Fair

Anticipated Lifecycle Replacements:

- 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 meter and regulator are located along the exterior walls of the building. The gas distribution piping within the building is malleable steel (black iron).

Anticipated Lifecycle Replacements:

- No components of significance

Actions/Comments:

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

G40 Electrical Site Improvements

G4050 Site Lighting					
Site Lighting	None	Pole Mounted	Bollard Lights	Ground Mounted	Parking Lot Pole Type
	☐	☒	☐	☐	☒
	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	Ticket Building	Location	Site
Item	Material	Item	Material
Exterior Siding	--	Roof Finishes	--
Interior Finishes	Floor : Concrete Ceiling : Concrete Walls : CMU	MEPF	See Tables in Section 5
Overall Building Condition			Fair

Not applicable. There are no major accessory structures.

Anticipated Lifecycle Replacements:

- Toilets
- Urinals
- Secondary transformers
- Toilet partitions
- Lavatories

Actions/Comments:

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

9. Opinions of Probable Costs

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

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

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

7.1 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.

7.2 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.

7.3 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.

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 High 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 3, 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 Huron High School, Field, 2 Ticket Buildings, 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 **Error! Reference source not found.** 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 **Error! Reference source not found.** 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

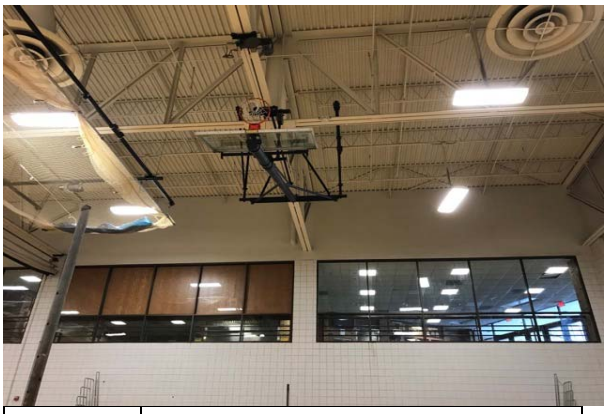
#5:	EXTERIOR DOORS

#6:	SITE FENCING

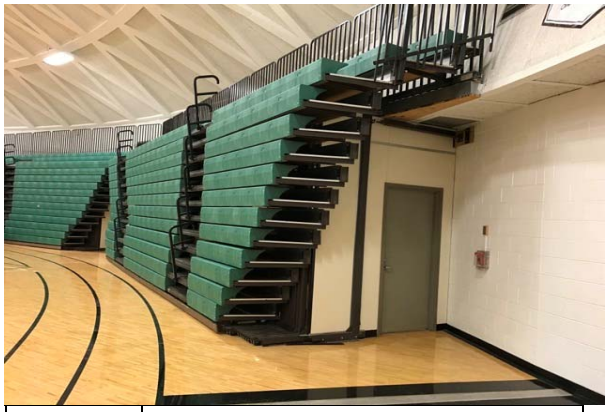
#7:	ASPHALT PARKING LOT

#8:	EXTERIOR LIGHTING

#9:	EPDM ROOF



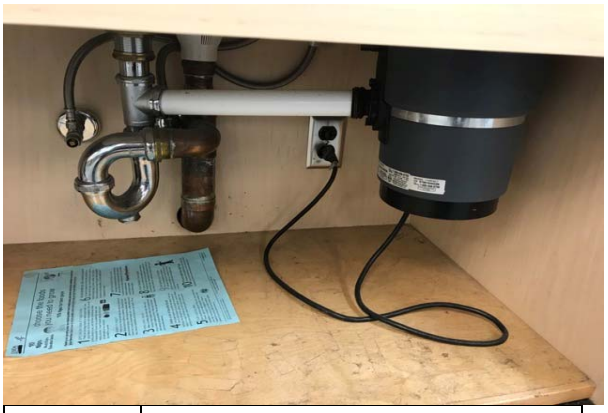
#10:	BASKETBALL BACKSTOP



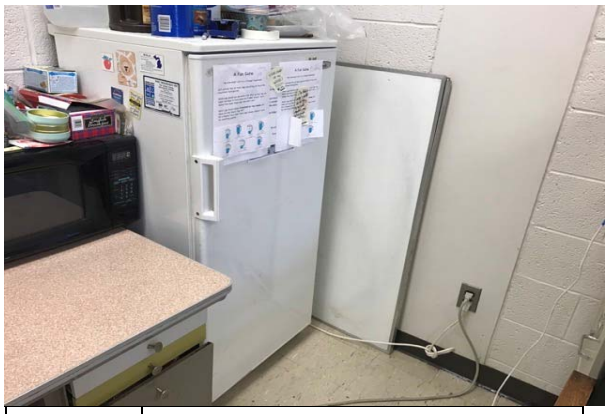
#11:	BLEACHERS

#12:	INTERIOR DOOR

#13:	LOCKERS



#14:	GARBAGE DISPOSAL



#15:	REFRIGERATOR

#16:	SCOREBOARD

#17:	TIME CONTROL CLOCK

#18:	TOILET PARTITIONS

#19:	ELEVATOR CONTROLS

#20:	WHEELCHAIR LIFT

#21:	SUMP PUMP

#22:	DRINKING FOUNTAIN

#23:	LAVATORY

#24:	EYE WASH STATION

#25:	BACKFLOW PREVENTER

#26:	DISTRIBUTION PUMP, HEATING WATER

#27:	DOMESTIC BOILER, GAS

#28:	SINK, STAINLESS STEEL

#29:	TOILET, TANKLESS (WATER CLOSET)

#30:	URINAL, VITREOUS CHINA

#31:	WATER HEATER, GAS

#32:	WATER STORAGE TANK

#33:	AIR COMPRESSOR

#34:	COOLING TOWER

#35:	CHILLER

#36:	AIR HANDLER UNIT

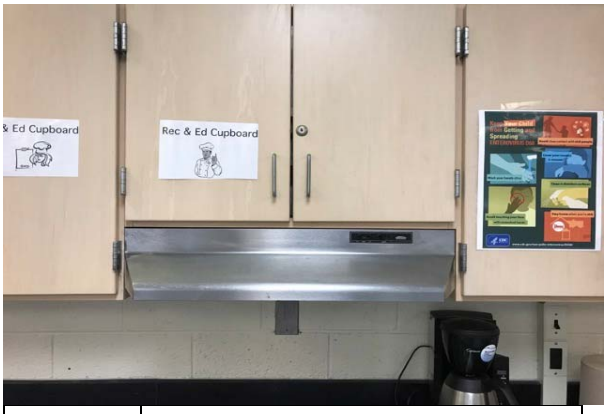
#37:	BOILER, GAS

#38:	BUILDING AUTOMATION SYSTEM (HVAC CONTROLS)

#39:	CABINET HEATER, ELECTRIC

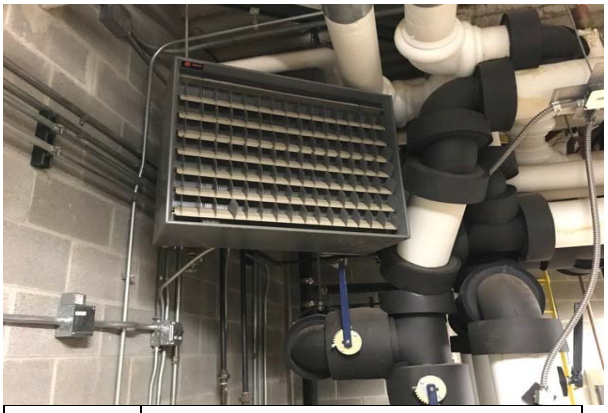
#40:	CHEMICAL FEED SYSTEM

#41:	EXHAUST FAN, CENTRIFUGAL



#42:	RANGE HOOD

#43:	CEILING FAN



#44:	UNIT HEATER, HYDRONIC

#45:	WALL HEATER, GAS W/ ELECTRIC FAN

#46:	BACKFLOW PREVENTER

#47:	DEFIBRILLATOR, CABINET MOUNTED

#48:	EXIT LIGHTING FIXTURE, W/ BATTERY

#49:	FIRE EXTINGUISHER

#50:	SPRINKLER HEADS

#51:	LIGHTING SYSTEM

#52:	DISTRIBUTION PANEL

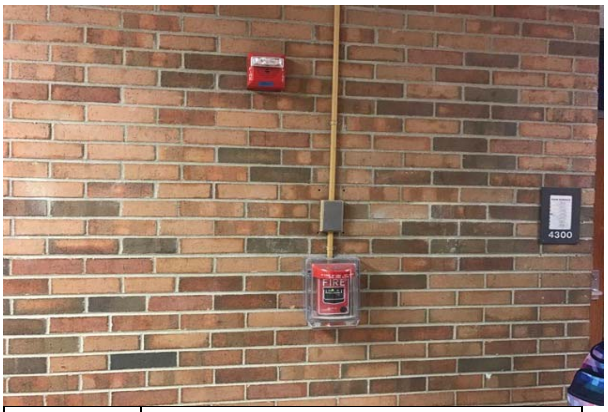
#53:	MOTOR CONTROL CENTER

#54:	SECONDARY TRANSFORMER

#55:	SWITCHBOARD

#56:	VARIABLE FREQUENCY DRIVE (VFD)

#57:	FIRE ALARM CONTROL PANEL, ADDRESSABLE



#58:	FIRE ALARM SYSTEM

#59:	SECURITY/SURVEILLANCE SYSTEM

#60:	CONVECTION OVEN, DOUBLE

#61:	COMMERCIAL KITCHEN, DISHWASHER

#62:	COMMERCIAL KITCHEN, FOOD WARMER

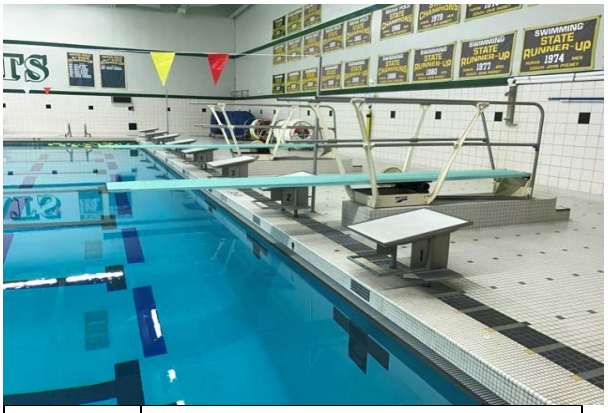
#63:	COMMERCIAL KITCHEN, ICEMAKER, FREESTANDING

#64:	COMMERCIAL KITCHEN, REFRIGERATOR

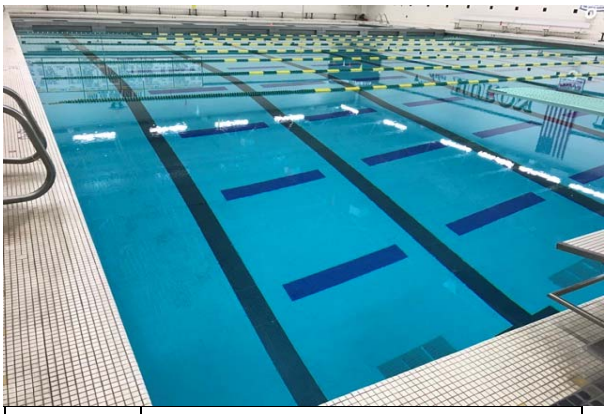
#65:	KILN

#66:	COMMERCIAL KITCHEN, WALK-IN FREEZER

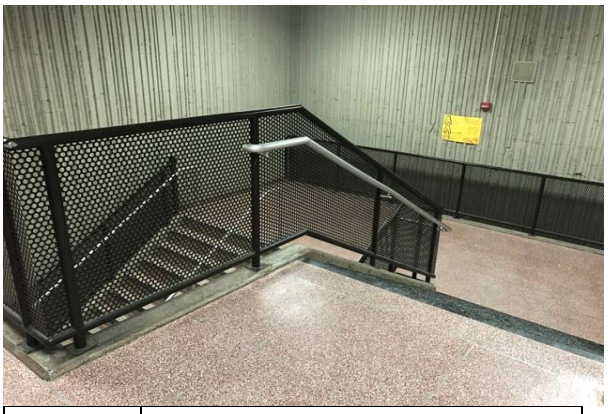
#67:	COMMERCIAL KITCHEN, WALK-IN REFRIGERATOR



#68:	SWIMMING POOL DIVING BOARD



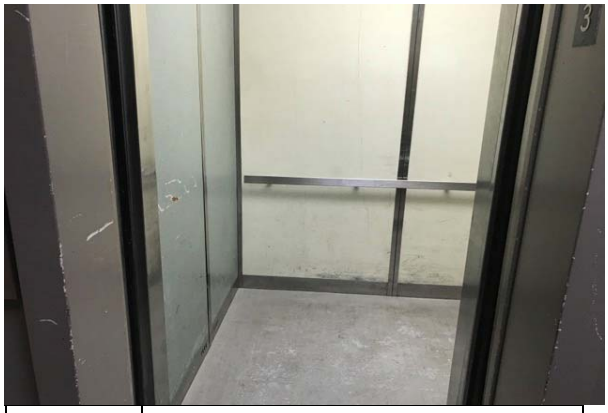
#69:	SWIMMING POOL



#70:	STAIRWELL

#71:	KITCHEN

#72:	RESTROOM

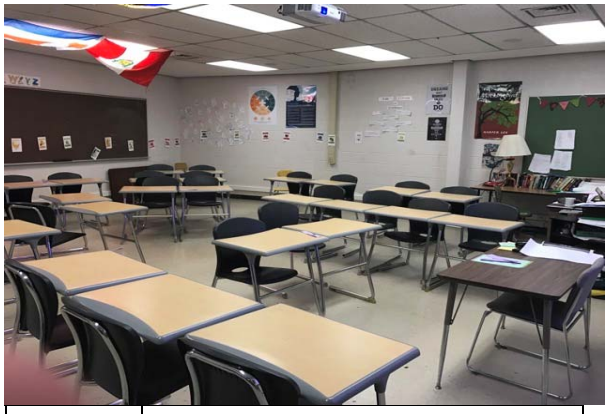


#73:	ELEVATOR INTERIOR

#74:	OFFICE

#75:	HALLWAY

#76:	LIBRARY

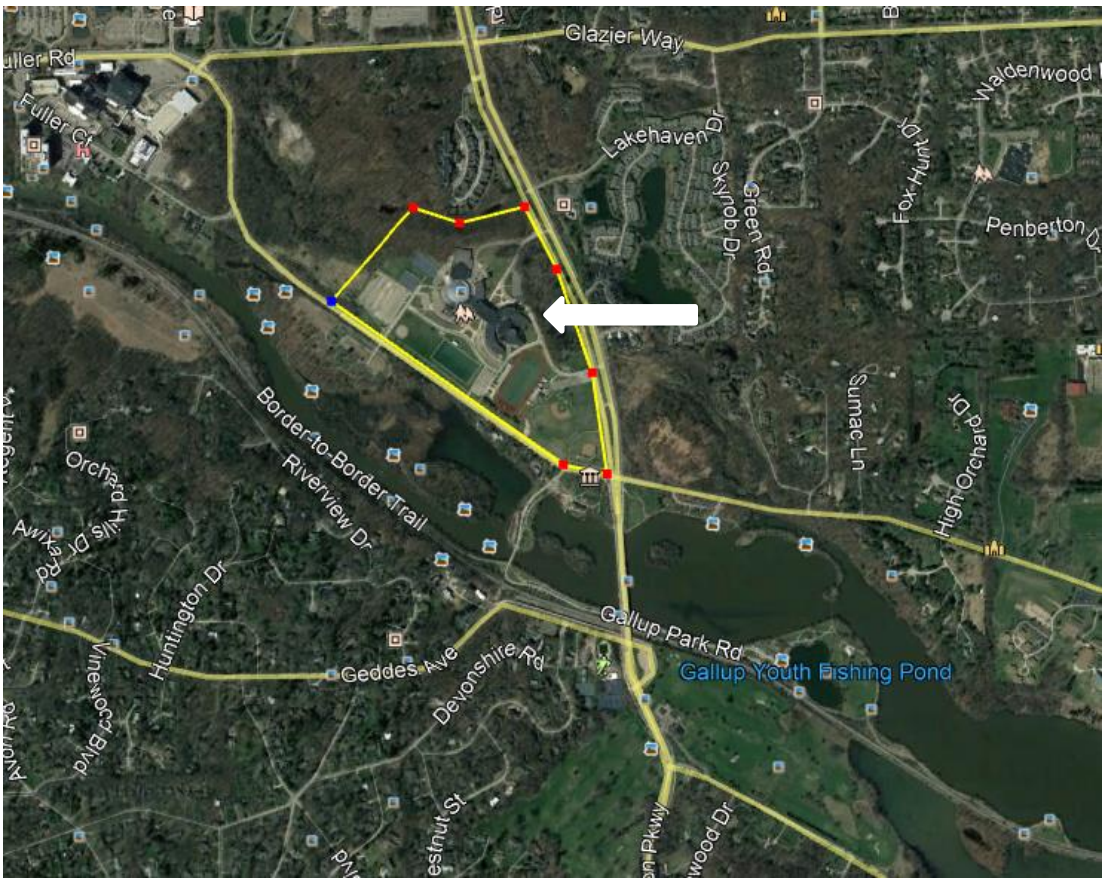


#77:	CLASSROOM

#78:	ROOF

Appendix B:
Site and Floor Plans

Site Plan



emg	**Project Name:** Huron High School, Field, 2 Ticket Buildings	**Project Number:** 129010.18R000-034.354
	Source: Google Earth	**On-Site Date:** February 12-February 14, 2018

ANN ARBOR HURON HIGH SCHOOL

SCHOOL MAP

To find a room:

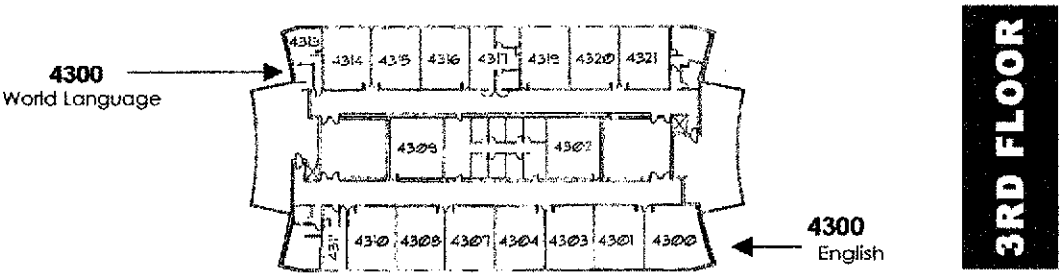
- 1st digit is the AREA of the school
- 2nd digit is the FLOOR of the school
- Last 2 digits are the ROOM number

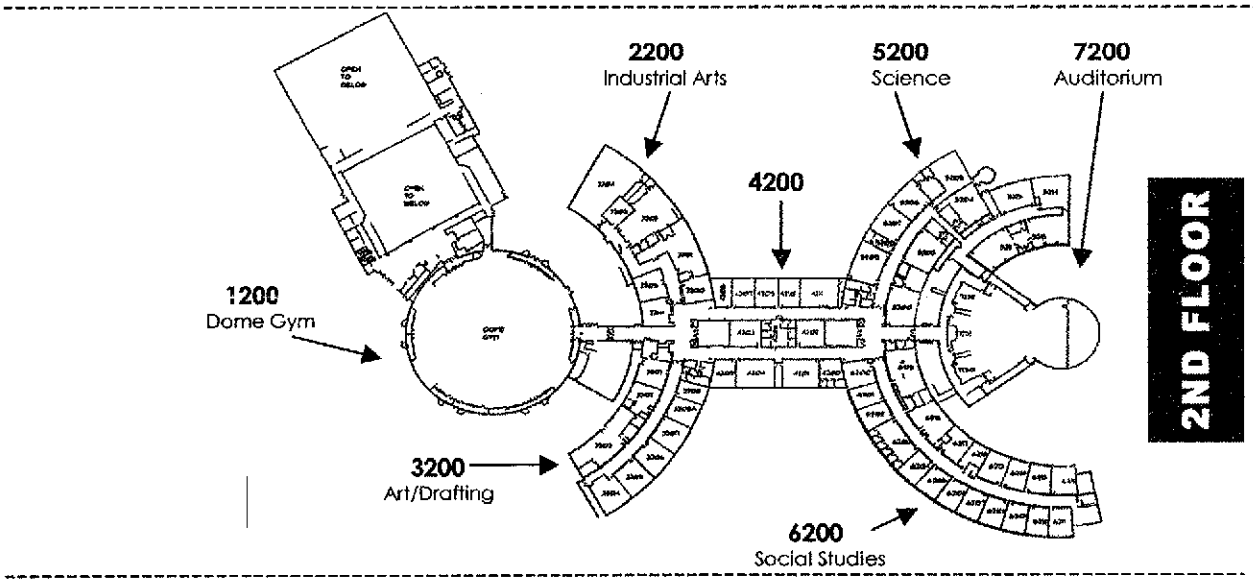
Example: Room 6217

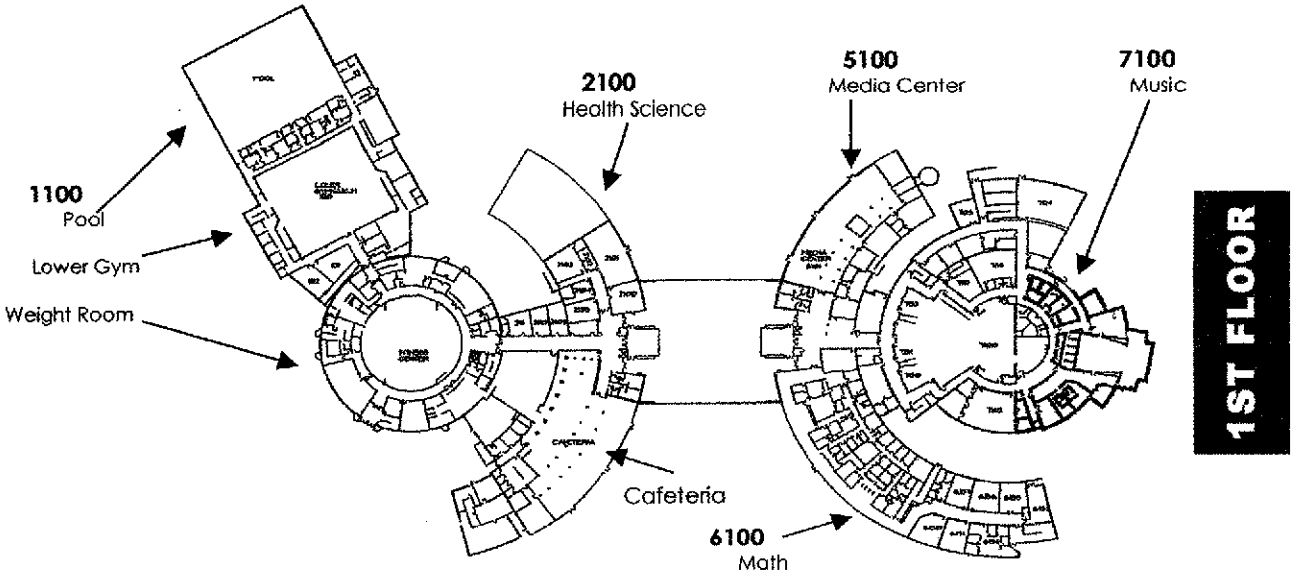
AREA 6

FLOOR 2

ROOM #17

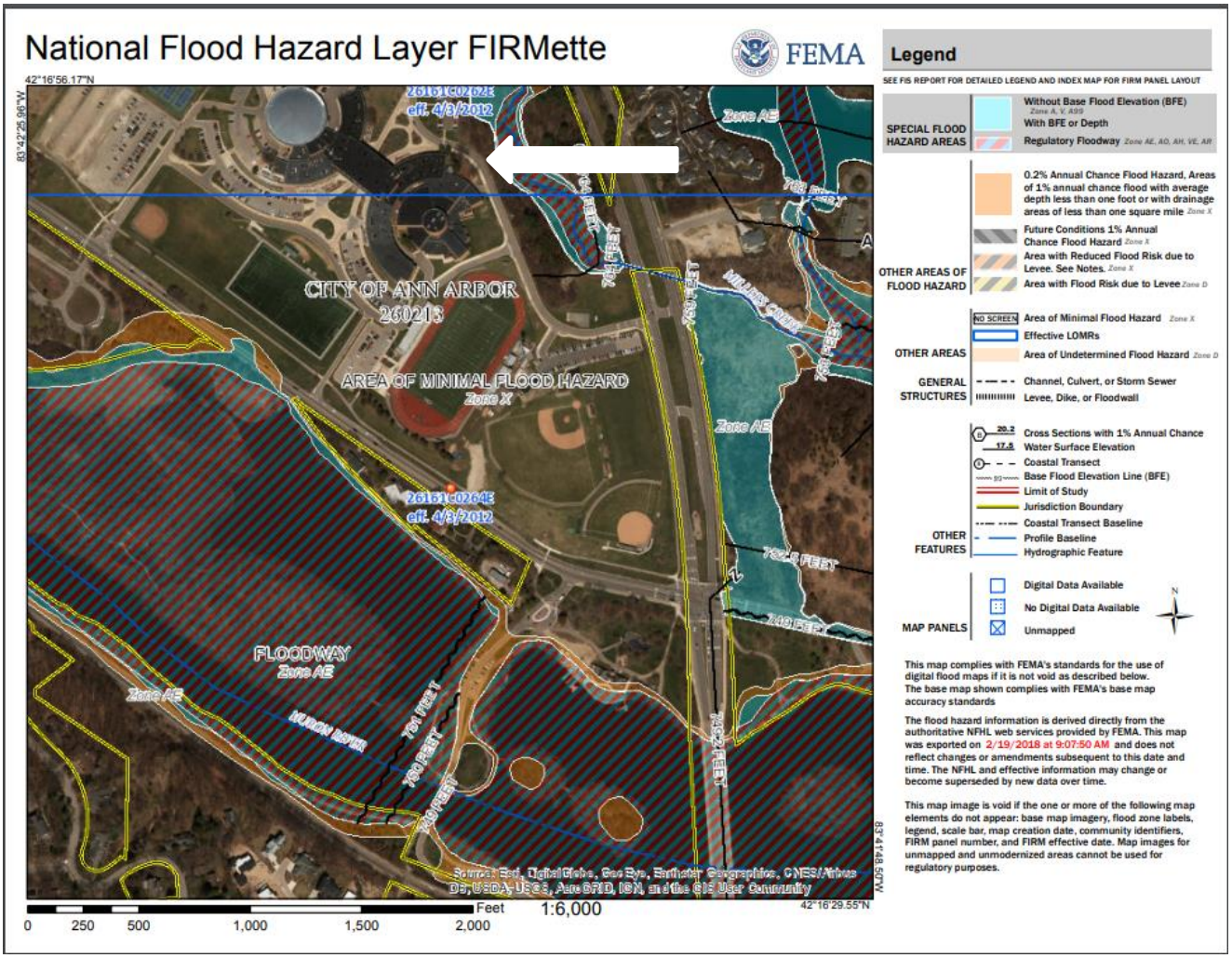






Appendix C:
Supporting Documentation

Flood Map



emg	**Project Name:** **Huron High School, Field, 2 Ticket Buildings**	**Project Number:** **129010.18R000-034.354**
	Source: **FEMA Flood Maps**	**On-Site Date:** **February 12-February 14, 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: Huron High School		Building #:	
Name of person completing questionnaire: Dr. Schwamb			
Length of Association With the Property: 5 years		Phone Number:	

Site Information	
Year of Construction?	1969
No. of Stories?	3
Total Site Area?	55.50 acres
Total Building Area?	405,187 SF

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.	None
Planned Capital Expenditure For Next Year?	none
Age of the Roof?	-
What bldg. Systems Are Responsibilities of Tenants? (HVAC/Roof/Interior/Exterior/Paving)	Outside contractor

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			
	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	X	X	☐	Elevator rooms locked
Access to Roof/Attic Space	X	☐	☐	Too much snow to go on
Access to Building As-Built Drawings	☐	X	☐	
Site plan with bldg., roads, parking and other features	☐	X	☐	
Contact Details for Mech, Elevator, Roof, Fire Contractors:	☐	X	☐	
List of Commercial Tenants in the property	X	☐	☐	
Previous reports pertaining to the physical condition of property.	☐	X	☐	
ADA survey and status of improvements implemented.	☐	X	☐	
Current / pending litigation related to property condition.	☐	X	☐	
Any brochures or marketing information.	☐	X	☐	

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 & 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.