

FACILITIES MAINTENANCE MANAGEMENT

Roofing - life cycle cost analysis

Projected Inflation Per Year

3.50% unless noted below

AREA	DESCRIPTION	Year Comp.	SqFt	Est Total Replacement Cost Based on Yr 2021	Life Cycle (yrs)	Est Annual Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost
							2025	2026	2027	2028	2029
1	K Wing	2012	12,928	\$263,214	20	\$13,161	\$0	\$0	\$0	\$0	\$0
1	G Wing	2012	29,049	\$591,438	20	\$29,572	\$0	\$0	\$0	\$0	\$0
1	M Wing	2012	13,725	\$279,441	20	\$13,972	\$0	\$0	\$0	\$0	\$0
1	Z Wing - Garage	2012	11,282	\$229,702	20	\$11,485	\$0	\$0	\$0	\$0	\$0
1	Z Wing - Garage	2012	864	\$17,591	20	\$880	\$0	\$0	\$0	\$0	\$0
2	C Wing - Mechanical Room	2012	485	\$9,875	20	\$494	\$0	\$0	\$0	\$0	\$0
3	H/J Hall	2005	15,999	\$325,740	20	\$16,287	\$0	\$348,940	\$0	\$0	\$0
3	H Wing	2005	7,742	\$157,627	20	\$7,881	\$0	\$168,854	\$0	\$0	\$0
3	J Wing	2005	16,798	\$342,007	20	\$17,100	\$0	\$366,367	\$0	\$0	\$0
4	P Wing - Pool	2003	25,674	\$522,723	20	\$26,136	\$541,018	\$0	\$0	\$0	\$0
4	P Wing Hall	2003	1,376	\$28,015	20	\$1,401	\$28,996	\$0	\$0	\$0	\$0
4	P Wing - Gym	2003	9,548	\$194,397	20	\$9,720	\$201,201	\$0	\$0	\$0	\$0
4	P Wing East	2003	5,520	\$112,387	20	\$5,619	\$116,321	\$0	\$0	\$0	\$0
4	P Wing North	2003	1,137	\$23,149	20	\$1,157	\$23,960	\$0	\$0	\$0	\$0
4	P Wing West	2003	5,520	\$112,387	20	\$5,619	\$116,321	\$0	\$0	\$0	\$0
5	N Wing Court Elevator	2003	453	\$9,223	20	\$461	\$9,546	\$0	\$0	\$0	\$0
5	N Wing - Pioneer Gym	2003	31,074	\$632,667	20	\$31,633	\$654,810	\$0	\$0	\$0	\$0
5	N Wing Hall	2003	28,657	\$583,457	20	\$29,173	\$603,877	\$0	\$0	\$0	\$0
6	B Walkway	2007	846	\$17,225	20	\$861	\$0	\$0	\$0	\$19,766	\$0
6	C Wing	2007	5,926	\$120,653	20	\$6,033	\$0	\$0	\$0	\$138,453	\$0
6	D Wing Hall	2007	7,375	\$150,155	20	\$7,508	\$0	\$0	\$0	\$172,306	\$0
6	G Wing	2007	4,647	\$94,613	20	\$4,731	\$0	\$0	\$0	\$108,571	\$0
6	B Wing & Hall	2007	14,571	\$296,666	20	\$14,833	\$0	\$0	\$0	\$340,431	\$0
6	B Wing West	2007	11,108	\$226,159	20	\$11,308	\$0	\$0	\$0	\$259,523	\$0
6	B Wing	2007	3,895	\$79,302	20	\$3,965	\$0	\$0	\$0	\$91,001	\$0
6	D/E Connector/East	2007	1,019	\$20,747	20	\$1,037	\$0	\$0	\$0	\$23,807	\$0
6	C/D Connector/East	2007	858	\$17,469	20	\$873	\$0	\$0	\$0	\$20,046	\$0
6	C/D Wing Main Hall	2007	4,036	\$82,173	20	\$4,109	\$0	\$0	\$0	\$94,295	\$0
7	L Wing	2003	19,441	\$395,819	20	\$19,791	\$409,672	\$0	\$0	\$0	\$0
7	L & M Wing Addition - Tech Area	2003	56,299	\$1,146,248	20	\$57,312	\$1,186,366	\$0	\$0	\$0	\$0
7	S Wing - Fine Arts Bldg	2003	27,572	\$561,366	20	\$28,068	\$581,014	\$0	\$0	\$0	\$0
8	L Wing - Process Training	2001	4,794	\$97,606	20	\$4,880	\$101,022	\$0	\$0	\$0	\$0
9	E Wing	2009	19,237	\$391,665	20	\$19,583	\$0	\$0	\$0	\$0	\$0
9	C Wing High Bay Orig Bldg	2009	2,619	\$53,323	20	\$2,666	\$0	\$0	\$0	\$0	\$0
9	D Wing High Bay	2009	3,180	\$64,745	20	\$3,237	\$0	\$0	\$0	\$0	\$0
9	D Wing	2009	13,899	\$282,984	20	\$14,149	\$0	\$0	\$0	\$0	\$0
9	C Wing High Bay SLTF	2009	1,617	\$32,922	20	\$1,646	\$0	\$0	\$0	\$0	\$0
12	C Wing West	2021	10,409	\$211,927	30	\$7,064	\$0	\$0	\$0	\$0	\$0
14	F Wing	2020	30,967	\$630,488	20	\$31,524	\$0	\$0	\$0	\$0	\$0
17	C/D/E Connector/West	2021	19,466	\$396,328	30	\$13,211	\$0	\$0	\$0	\$0	\$0
17	D Wing Penthouse	2021	1,431	\$29,135	30	\$971	\$0	\$0	\$0	\$0	\$0
17	C/D Corridor Connector/West	2021	2,399	\$48,844	30	\$1,628	\$0	\$0	\$0	\$0	\$0
17	Library	2021	46,131	\$939,227	30	\$31,308	\$0	\$0	\$0	\$0	\$0

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							2025	2026	2027	2028	2029
1M	Midland Center Sloped Roof Area	1989	28,120	\$668,666	20	\$33,433	\$692,069	\$0	\$0	\$0	\$0
2M	Midland Center Flat Roof Area	1989	3,220	\$45,147	20	\$2,257	\$46,727	\$0	\$0	\$0	\$0
DM1	Downtown Midland Center	2020	9,219	\$129,257	20	\$6,463	\$0	\$0	\$0	\$0	\$0
DM2	Downtown Midland Center - Green Roof	2020	2,768	\$38,809	20	\$1,940	\$0	\$0	\$0	\$0	\$0
DS1	Downtown Saginaw Center	2018	12,580	\$176,380	20	\$8,819	\$0	\$0	\$0	\$0	\$0
1P	Planetarium - Main Area	1996	13,163	\$267,999	20	\$13,400	\$277,379	\$0	\$0	\$0	\$0
2P	Planetarium - Low Area West Wing	1996	567	\$11,544	20	\$577	\$11,948	\$0	\$0	\$0	\$0
3P	Planetarium - Stair Tower	1996	340	\$6,922	20	\$346	\$7,165	\$0	\$0	\$0	\$0
4P	Planetarium - Observation Deck and Bridge	1996	1,968	\$83,191	25	\$3,328	\$86,103	\$0	\$0	\$0	\$0
TOTAL AREA			603,518								
TOTAL REPLACEMENT VALUE				\$12,250,741	\$584,614	\$5,695,514	\$884,161	\$0	\$1,268,198	\$0	

Next three years	\$6,579,676				
Main Campus	\$4,574,124	\$884,161	\$0	\$1,268,198	\$0
Midland Center	\$738,796	\$0	\$0	\$0	\$0
DT Midland Center	\$0	\$0	\$0	\$0	\$0
DT Saginaw Center	\$0	\$0	\$0	\$0	\$0
Bay City Planetarium	\$382,595	\$0	\$0	\$0	\$0

FACILITIES MAINTENANCE MANAGEMENT

ROAD & PARKING LOT PAVING, life cycle cost analysis

Projected Inflation Per Year

6.00%

Area	DESCRIPTION	Yr Comp.	PASER Rating	SqFt	Est Total Replacement Cost Based on Yr 2020	Life Cycle (yrs)	Est Annual Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost
								2025	2026	2027	2028	2029
3a	West Parking Area Tray A	2015	8	17,154.35	\$137,235	25	\$5,489	\$0	\$0	\$0	\$0	\$0
3b	West Parking Area Tray B	2015	8	22,323.42	\$178,587	25	\$7,143	\$0	\$0	\$0	\$0	\$0
3c	West Parking Area Tray C	2015	8	21,854.40	\$174,835	25	\$6,993	\$0	\$0	\$0	\$0	\$0
3d	West Parking Area Tray D	2015	8	21,385.71	\$171,086	25	\$6,843	\$0	\$0	\$0	\$0	\$0
3e	West Parking Area Tray E	2015	8	22,679.50	\$181,436	25	\$7,257	\$0	\$0	\$0	\$0	\$0
3f	West Parking Area Tray F	2015	8	22,396.49	\$179,172	25	\$7,167	\$0	\$0	\$0	\$0	\$0
3g	West Parking Area Tray G	2015	8	22,300.70	\$178,406	25	\$7,136	\$0	\$0	\$0	\$0	\$0
3h	West Parking Area Tray H	2015	8	21,714.80	\$173,718	25	\$6,949	\$0	\$0	\$0	\$0	\$0
3i	West Parking Area Tray I	2015	8	21,877.14	\$175,017	25	\$7,001	\$0	\$0	\$0	\$0	\$0
3j	West Parking Area Tray J	2015	8	22,308.48	\$178,468	25	\$7,139	\$0	\$0	\$0	\$0	\$0
3k	West Parking Area Tray K	2015	8	22,057.36	\$176,459	25	\$7,058	\$0	\$0	\$0	\$0	\$0
4	West Parking Area (South End)	2005	6	79,801.45	\$638,412	20	\$31,921	\$0	\$717,319	\$0	\$0	\$0
17	Northwest Parking Area	1990	4	106,152.32	\$849,219	33	\$25,734	\$900,172	\$0	\$0	\$1,011,433	\$0
15	Baseball Parking Area	2019	10	39,800.00	\$318,400	25	\$12,736	\$0	\$0	\$0	\$0	\$0
2a	South West Parking Tray A	2008	4	9,505.74	\$76,046	13	\$5,850	\$0	\$0	\$0	\$0	\$0
2b	South West Parking Tray B	2008	4	36,674.52	\$293,396	13	\$22,569	\$0	\$0	\$0	\$0	\$0
2c	South West Parking Tray C	2008	4	36,541.15	\$292,329	13	\$22,487	\$0	\$0	\$0	\$0	\$0
2d	South West Parking Tray D	2008	4	32,689.63	\$261,517	13	\$20,117	\$0	\$0	\$0	\$0	\$0
2e	South West Parking Road	2008	4	45,688.05	\$365,504	13	\$28,116	\$0	\$0	\$0	\$0	\$0
1a	South East Parking Tray A	2008	4	10,766.99	\$86,136	13	\$6,626	\$0	\$0	\$0	\$0	\$0
1b	South East Parking Tray B	2008	4	63,049.96	\$504,400	13	\$38,800	\$0	\$0	\$0	\$0	\$0
1c	South East Parking Tray C	2008	4	61,698.73	\$493,590	13	\$37,968	\$0	\$0	\$0	\$0	\$0
1d	South East Parking Road	2008	4	48,516.96	\$388,136	13	\$29,857	\$0	\$0	\$0	\$0	\$0

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								2025	2026	2027	2028	2029
5a	East Parking Area Tray A	2013	8	24,360.00	\$194,880	25	\$7,795	\$0	\$0	\$0	\$0	\$0
5b	East Parking Area Tray B	2013	8	24,691.00	\$197,528	25	\$7,901	\$0	\$0	\$0	\$0	\$0
5c	East Parking Area Tray C	2013	8	24,920.00	\$199,360	25	\$7,974	\$0	\$0	\$0	\$0	\$0
5d	East Parking Area Tray D	2013	8	24,977.00	\$199,816	25	\$7,993	\$0	\$0	\$0	\$0	\$0
5e	East Parking Area Tray E	2013	8	24,830.00	\$198,640	25	\$7,946	\$0	\$0	\$0	\$0	\$0
5f	East Parking Area Tray F	2013	8	24,831.00	\$198,648	25	\$7,946	\$0	\$0	\$0	\$0	\$0
5g	East Parking Area Tray G	2013	8	25,620.00	\$204,960	25	\$8,198	\$0	\$0	\$0	\$0	\$0
5h	East Parking Area Tray H	2013	8	21,389.00	\$171,112	25	\$6,844	\$0	\$0	\$0	\$0	\$0
5i	East Parking Area Tray I	2013	8	25,846.00	\$206,768	25	\$8,271	\$0	\$0	\$0	\$0	\$0
6	East Parking Area (South End)	2019	10	100,974.00	\$807,792	25	\$32,312	\$0	\$0	\$0	\$0	\$0
16	East Parking Area (North End)	2003	7	61,922.00	\$495,376	23	\$21,538	\$0	\$0	\$590,001	\$0	\$0
19a	Boiler House Parking Area	2003	7	17,444.45	\$139,556	25	\$5,582	\$0	\$0	\$0	\$0	\$186,757
19b	Maintenance Drive	2003	7	26,902.53	\$215,220	25	\$8,609	\$0	\$0	\$0	\$0	\$288,013
11a	North Campus Drive (West)	2007	8	10,931.74	\$87,454	19	\$4,603	\$0	\$0	\$104,159	\$0	\$0
11b	North Campus Drive (East)	2010	8	34,765.47	\$278,124	16	\$17,383	\$0	\$0	\$331,250	\$0	\$0
12a	East Campus Drive (North)	2010	8	35,533.00	\$284,264	16	\$17,767	\$0	\$0	\$338,563	\$0	\$0
12b	East Campus Drive (South)	2019	10	13,518.00	\$108,144	25	\$4,326	\$0	\$0	\$0	\$0	\$0
13	South Campus Drive	2019	10	49,997.98	\$399,984	25	\$15,999	\$0	\$0	\$0	\$0	\$0
14a	West Campus Drive (South)	2019	10	5,513.94	\$44,112	25	\$1,764	\$0	\$0	\$0	\$0	\$0
14b	West Campus Drive (South)	2005	8	10,245.05	\$81,960	21	\$3,903	\$0	\$0	\$97,616	\$0	\$0
14c	West Campus Drive (Mid)	2015	8	23,903.98	\$191,232	11	\$17,385	\$0	\$0	\$227,760	\$0	\$0
14d	West Campus Drive (North)	2007	8	12,290.32	\$98,323	19	\$5,175	\$0	\$0	\$117,104	\$0	\$0

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								2025	2026	2027	2028	2029
8a	Hotchkiss Drive	2000	7	57,403.98	\$459,232	20	\$22,962	\$486,786	\$0	\$0	\$0	\$0
8b	Hotchkiss Dr. TRN1 Parking	2000	7	4,427.45	\$35,420	20	\$1,771	\$37,545	\$0	\$0	\$0	\$0
8c	Hotchkiss Dr. TRN2 Parking	2000	7	3,175.47	\$25,404	20	\$1,270	\$26,928	\$0	\$0	\$0	\$0
10a	Delta Drive	2009	8	56,799.26	\$454,394	25	\$18,176	\$0	\$0	\$0	\$0	\$0
10b	Delta Drive	2008	8	10,305.87	\$82,447	25	\$3,298	\$0	\$0	\$0	\$0	\$0
10c	Delta Drive Parking Lot	2008	8	561.50	\$4,492	25	\$180	\$0	\$0	\$0	\$0	\$0
10d	Delta Drive Parking Lot	2009	8	18,788.28	\$150,306	25	\$6,012	\$0	\$0	\$0	\$0	\$0
9	Road to Mackinaw	2007	8	44,235.03	\$353,880	25	\$14,155	\$0	\$0	\$0	\$0	\$0
7	X Building Area	2010	8	23,243.10	\$185,945	25	\$7,438	\$0	\$0	\$0	\$0	\$0
21	Tennis Court	1991	N/A	59,526.08	\$65,000	25	\$2,600	\$0	\$0	\$0	\$0	\$0
20a	Farm House Drive	2019	10	6,194.49	\$49,556	25	\$1,982	\$0	\$0	\$0	\$0	\$0
20b	Farm House Parking Area	2001	7	21,615.32	\$172,923	22	\$7,860	\$183,298	\$0	\$0	\$0	\$0
18	Water Meter Building Area	2003	7	999.31	\$7,994	22	\$363	\$0	\$8,983	\$0	\$0	\$0
	Midland Center	1992	3	117,000.00	\$936,000	25	\$37,440	\$0	\$0	\$0	\$0	\$0
	Downtown Midland Center	2020	10	11,564.00	\$92,512	25	\$3,700	\$0	\$0	\$0	\$0	\$0
	Downtown Saginaw Center	2018	10	10,957.00	\$87,656	25	\$3,506	\$0	\$0	\$0	\$0	\$0
	Saginaw Student Leased Lot	1978	2	73,150.00	\$585,200	25	\$23,408	\$0	\$0	\$0	\$738,802	\$0
	Planetarium Parking Lot	1996	7	30,005.00	240,040.00	25	\$9,602	\$0	\$0	\$0	\$0	\$0
TOTAL AREA				1,984,295.45								
TOTAL REPLACEMENT VALUE					\$15,463,155		\$751,893	\$1,634,728	\$726,302	\$1,806,453	\$1,750,234	\$474,770

Main Campus	\$734,556	\$726,302	\$1,806,453	\$1,011,433	\$474,770
Midland Center	\$0	\$0	\$0	\$0	\$0
Bay City Planetarium	\$0	\$0	\$0	\$0	\$0
Downtown Saginaw Center	\$0	\$0	\$0	\$738,802	\$0