

FAC 7417 RECREATION CENTER

FY22 SUC: \$6.44 / SF
Source: Calculated using R.S. Means CostWorks 2021 Qtr 3
component prices

FAC 7417 RECREATION CENTER

Release 2021 Qtr 3
Zip Code Prefix 222
Type MR

UM SF
Design Life 50
Average Size 6884.0

SUC \$6.44

Adjusted Occurrences are the occurrences remaining after subtracting Repair/Replacement Overlaps. Overlap reduction removes a repair when it occurs the same year as a replacement.

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Repair clay brick wall, 1st floor	25	243.00 S.F.	\$10,443.32	\$12,816.91	2.0000	2	2	\$25,633.81	\$25,633.81
Replace glass - 1st floor (1% of glass) - steel frame window	1	4.32 S.F.	\$52.09	\$61.22	50.0000	50	50	\$3,061.07	\$3,061.07
Repair 3'-9" x 5'-5" steel frame window - 1st floor.	20	28.80 Ea.	\$8,591.14	\$10,092.04	2.5000	2	2	\$20,184.08	\$20,184.08
Refinish 3'-9" x 5'-5" steel frame window - 1st floor.	5	28.80 Ea.	\$2,306.39	\$2,861.19	10.0000	10	10	\$28,611.86	\$28,611.86
Replace 3'-9" x 5'-5" steel frame window - 1st floor.	45	32.00 Ea.	\$53,019.46	\$61,048.66	1.1111	1	1	\$61,048.66	\$61,048.66
Finish new 3'-9" x 5'-5" steel frame window - 1st floor.	45	32.00 Ea.	\$2,223.44	\$2,757.28	1.1111	1	1	\$2,757.28	\$2,757.28
Repair glazed wood doors	12	1.00 Ea.	\$463.42	\$554.51	4.1667	4	4	\$2,218.06	\$2,218.06
Replace 3'-0" x 7'-0" glazed wood door	40	0.90 Ea.	\$1,469.17	\$1,695.45	1.2500	1	1	\$1,695.45	\$1,695.45
Refinish glazed wood doors	4	0.90 Ea.	\$86.68	\$106.12	12.5000	12	12	\$1,273.44	\$1,273.44
Repair steel, painted, door	14	3.60 Ea.	\$2,250.27	\$2,678.42	3.5714	3	3	\$8,035.26	\$8,035.26
Refinish 3'-0" x 7'-0" steel, painted, door	4	3.60 Ea.	\$149.04	\$183.12	12.5000	12	12	\$2,197.42	\$2,197.42
Replace 3'-0" x 7'-0" steel, painted, door	45	3.60 Ea.	\$2,538.23	\$2,951.03	1.1111	1	1	\$2,951.03	\$2,951.03
Replace brass door lockset exterior	30	3.60 Ea.	\$1,707.12	\$1,974.54	1.6667	1	1	\$1,974.54	\$1,974.54
Replace brass door closer	15	4.00 Ea.	\$980.82	\$1,157.18	3.3333	3	3	\$3,471.55	\$3,471.55
Debris removal by hand & visual inspection,modified bitum/thermoplstc	1	6.21 M.S.F.	\$233.87	\$285.25	50.0000	50	50	\$14,262.35	\$14,262.35
Non-destructive moisture inspection, modified bituminous/thermoplastic	5	6.21 M.S.F.	\$725.67	\$885.10	10.0000	10	10	\$8,851.05	\$8,851.05
Minor thermoplastic membrane repairs, 2% of roof area	1	1.24 Sq.	\$402.31	\$478.70	50.0000	50	50	\$23,934.97	\$23,934.97
Flashing repairs, 2 S.F. per sq. repaired, modified bitumen/thermoplastic	1	30.60 S.F.	\$117.90	\$141.11	50.0000	50	50	\$7,055.63	\$7,055.63
Membrane replacement-(25% of roof area),modified bitum/thermoplastic	20	15.48 Sq.	\$12,129.61	\$14,484.74	2.5000	2	2	\$28,969.48	\$28,969.48
Total roof replacement, modified bituminous / thermoplastic	25	69.00 Sq.	\$43,727.29	\$51,892.80	2.0000	2	2	\$103,785.60	\$103,785.60
Repair solid core wood door, interior	11	11.70 Ea.	\$3,433.39	\$3,996.30	4.5455	4	4	\$15,985.20	\$15,985.20
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	11.70 Ea.	\$507.37	\$623.02	12.5000	12	11	\$7,476.25	\$6,853.23
Replace 3'-0" x 7'-0" solid core wood door, interior	40	13.00 Ea.	\$6,362.55	\$7,355.53	1.2500	1	1	\$7,355.53	\$7,355.53
Replace panic bar	25	4.00 Ea.	\$4,746.14	\$5,453.16	2.0000	2	2	\$10,906.32	\$10,906.32
Office painting, 10' x 12', 10' high walls	5	9.00 Ea.	\$1,988.88	\$2,439.57	10.0000	10	10	\$24,395.68	\$24,395.68
Repair 4" x 4" thin set ceramic tile - (2% of walls)	10	0.09 C.S.F.	\$73.88	\$89.03	5.0000	5	5	\$445.17	\$445.17
Replace 4" x 4" thin set ceramic tile	75	0.60 C.S.F.	\$532.39	\$643.25	0.6667	0	0	\$0.00	\$0.00
Quarry tile floor repairs - (2% of floors)	15	24.75 S.F.	\$156.62	\$195.28	3.3333	3	3	\$585.84	\$585.84

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Replace quarry tile floor	50	1,377.00 S.F.	\$16,849.57	\$20,339.58	1.0000	1	1	\$20,339.58	\$20,339.58
Replace carpet	8	550.80 S.Y.	\$30,303.00	\$34,996.13	6.2500	6	6	\$209,976.76	\$209,976.76
Acoustic tile repairs - (2% of ceilings)	9	1.24 C.S.F.	\$1,125.55	\$1,308.10	5.5556	5	5	\$6,540.51	\$6,540.51
Replace acoustic tile ceiling, fire-rated	20	62.10 C.S.F.	\$32,554.60	\$38,370.73	2.5000	2	2	\$76,741.45	\$76,741.45
Replace flush valve diaphragm tankless water closet	10	9.00 Ea.	\$235.98	\$292.82	5.0000	5	5	\$1,464.11	\$1,464.11
Rebuild flush valve tankless water closet	20	9.00 Ea.	\$1,623.90	\$1,957.11	2.5000	2	2	\$3,914.23	\$3,914.23
Unplug clogged line tankless water closet	5	9.00 Ea.	\$1,965.56	\$2,458.14	10.0000	10	10	\$24,581.41	\$24,581.41
Replace tankless water closet	35	8.10 Ea.	\$10,418.39	\$12,056.81	1.4286	1	1	\$12,056.81	\$12,056.81
Replace tankless flush valve	25	9.00 Ea.	\$2,269.94	\$2,664.99	2.0000	2	2	\$5,329.99	\$5,329.99
Replace wax ring gasket for tankless water closet	5	9.00 Ea.	\$1,273.67	\$1,591.44	10.0000	10	10	\$15,914.38	\$15,914.38
Replace flush valve diaphragm for a urinal	7	4.00 Ea.	\$104.88	\$130.14	7.1429	7	7	\$911.00	\$911.00
Rebuild flush valve for a urinal	20	4.00 Ea.	\$721.74	\$869.83	2.5000	2	2	\$1,739.66	\$1,739.66
Unplug line urinal	5	4.00 Ea.	\$580.29	\$725.71	10.0000	10	10	\$7,257.12	\$7,257.12
Replace wall-hung urinal	35	4.00 Ea.	\$3,875.45	\$4,676.42	1.4286	1	1	\$4,676.42	\$4,676.42
Replace washer in spud connection lavatory, vitreous china	7	8.00 Ea.	\$131.70	\$160.64	7.1429	7	7	\$1,124.48	\$1,124.48
Replace washer in faucet lavatory, vitreous china	2	8.00 Ea.	\$103.08	\$128.41	25.0000	25	25	\$3,210.36	\$3,210.36
Replace faucets lavatory, vitreous china	10	8.00 Ea.	\$1,453.81	\$1,750.04	5.0000	5	5	\$8,750.22	\$8,750.22
Clean out strainer and P trap lavatory, vitreous china	2	8.00 Ea.	\$278.95	\$348.86	25.0000	25	25	\$8,721.58	\$8,721.58
Replace lavatory, vitreous china	35	8.00 Ea.	\$5,380.60	\$6,465.77	1.4286	1	1	\$6,465.77	\$6,465.77
Replace faucet washer sink, iron enamel	2	1.00 Ea.	\$12.78	\$15.92	25.0000	25	25	\$397.90	\$397.90
Clean trap sink, iron enamel	3	1.00 Ea.	\$8.57	\$10.72	16.6667	16	16	\$171.50	\$171.50
Replace faucets sink, iron enamel	10	1.00 Ea.	\$181.73	\$218.76	5.0000	5	5	\$1,093.78	\$1,093.78
Unstop sink, iron enamel	2	1.00 Ea.	\$41.82	\$52.30	25.0000	25	25	\$1,307.56	\$1,307.56
Replace sink, P.E.C.I. sink, iron enamel kitchen	35	1.00 Ea.	\$636.70	\$757.51	1.4286	1	1	\$757.51	\$757.51
Replace faucet washer sink, stainless steel	2	3.00 Ea.	\$38.33	\$47.75	25.0000	25	25	\$1,193.70	\$1,193.70
Clean trap sink, stainless steel	3	3.00 Ea.	\$25.71	\$32.16	16.6667	16	16	\$514.49	\$514.49
Replace faucets sink, stainless steel	10	3.00 Ea.	\$545.18	\$656.27	5.0000	5	5	\$3,281.33	\$3,281.33
Unstop sink, stainless steel	2	3.00 Ea.	\$125.46	\$156.91	25.0000	25	25	\$3,922.67	\$3,922.67
Replace sink, stainless steel	40	3.00 Ea.	\$3,377.84	\$3,959.46	1.2500	1	1	\$3,959.46	\$3,959.46
Check / minor repairs drinking fountain	1	4.00 Ea.	\$195.53	\$244.53	50.0000	50	50	\$12,226.52	\$12,226.52
Repair internal leaks drinking fountain	4	4.00 Ea.	\$180.32	\$225.51	12.5000	12	12	\$2,706.14	\$2,706.14
Correct water pressure drinking fountain	2	4.00 Ea.	\$167.29	\$209.21	25.0000	25	25	\$5,230.23	\$5,230.23
Replace refrigerant drinking fountain	2	4.00 Ea.	\$130.73	\$153.08	25.0000	25	25	\$3,826.92	\$3,826.92
Repair drain leak drinking fountain	4	4.00 Ea.	\$135.66	\$162.14	12.5000	12	10	\$1,945.66	\$1,621.39
Replace fountain drinking fountain	10	4.00 Ea.	\$5,124.62	\$6,058.24	5.0000	5	5	\$30,291.18	\$30,291.18
Drain and flush water heater, electric, 120 gallon	7	1.00 Ea.	\$294.38	\$368.15	7.1429	7	7	\$2,577.08	\$2,577.08

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Check operation water heater, electric, 120 gallon	3	1.00 Ea.	\$2.59	\$3.23	16.6667	16	16	\$51.73	\$51.73
Replace water heater, electric, 120 gallon	15	1.00 Ea.	\$14,632.58	\$16,736.89	3.3333	3	3	\$50,210.67	\$50,210.67
Inspect / check pump / motor operation, lubricate circulation pump, 1/12 HP	0.5	1.00 Ea.	\$8.03	\$10.04	100.0000	100	100	\$1,003.93	\$1,003.93
Replace pump / motor assembly circulation pump, 1/12 HP	10	1.00 Ea.	\$1,100.58	\$1,290.00	5.0000	5	5	\$6,449.98	\$6,449.98
Unclog floor drain, PVC	20	1.00 Ea.	\$47.80	\$59.77	2.5000	2	2	\$119.55	\$119.55
General maintenance & repair drain: roof, scupper, area	1	2.00 Ea.	\$73.98	\$92.51	50.0000	50	50	\$4,625.70	\$4,625.70
Replace drain: roof, scupper, area	40	2.00 Ea.	\$1,573.86	\$1,824.72	1.2500	1	1	\$1,824.72	\$1,824.72
Repair fan coil unit, 10 ton	10	2.00 Ea.	\$1,638.94	\$1,922.62	5.0000	5	4	\$9,613.12	\$7,690.49
Replace fan coil unit, 10 ton	15	2.00 Ea.	\$11,171.29	\$13,094.25	3.3333	3	3	\$39,282.75	\$39,282.75
Repair single zone rooftop unit, 25 ton	10	1.00 Ea.	\$47,397.42	\$54,623.55	5.0000	5	4	\$273,117.75	\$218,494.20
Replace single zone rooftop unit, 25 ton	15	1.00 Ea.	\$51,343.17	\$59,585.52	3.3333	3	3	\$178,756.56	\$178,756.56
Repair furnace, gas, 200 MBH residential	10	1.00 Ea.	\$11,436.88	\$13,148.54	5.0000	5	5	\$65,742.70	\$65,742.70
Replace furnace, gas, 200 MBH residential	15	1.00 Ea.	\$4,585.18	\$5,297.40	3.3333	3	3	\$15,892.19	\$15,892.19
Inspect sprinkler system	1	1.00 Ea.	\$34.33	\$42.93	50.0000	50	50	\$2,146.43	\$2,146.43
Replace sprinkler head	20	70.00 Ea.	\$5,986.60	\$7,363.27	2.5000	2	2	\$14,726.53	\$14,726.53
Maintenance and repair motor starter, up to 600 V	5	1.00 Ea.	\$279.64	\$337.60	10.0000	10	10	\$3,375.98	\$3,375.98
Maintenance and inspection motor starter, up to 600 V	0.5	1.00 Ea.	\$53.98	\$67.63	100.0000	100	100	\$6,763.01	\$6,763.01
Replace starter motor starter, up to 600 V	18	0.90 Ea.	\$724.78	\$862.27	2.7778	2	2	\$1,724.53	\$1,724.53
Maintenance and inspection lighting panel, indoor	3	1.00 Ea.	\$40.64	\$50.92	16.6667	16	16	\$814.74	\$814.74
Maintenance and repair breaker, enclosed, 240 V, 1 pole	25	42.00 Ea.	\$3,014.03	\$3,776.15	2.0000	2	2	\$7,552.29	\$7,552.29
Maintenance and inspection circuit breaker, enclosed, 240 V, 1 pole	1	42.00 Ea.	\$1,360.32	\$1,704.28	50.0000	50	50	\$85,213.90	\$85,213.90
Replace circuit breaker enclosed, 240 V, 1 pole circuit breaker	50	42.00 Ea.	\$21,480.87	\$25,508.58	1.0000	1	1	\$25,508.58	\$25,508.58
Replace fluorescent light fixture ballast, 80 W	10	63.00 Ea.	\$7,854.11	\$9,527.95	5.0000	5	5	\$47,639.73	\$47,639.73
Replace lamps (2 lamps), 4', 34 W energy saver	10	63.00 Ea.	\$1,588.48	\$1,989.47	5.0000	5	5	\$9,947.36	\$9,947.36
Repair smoke detector	10	16.20 Ea.	\$913.48	\$1,129.37	5.0000	5	4	\$5,646.84	\$4,517.47
Check operation smoke detector	1	18.00 Ea.	\$291.50	\$365.20	50.0000	50	50	\$18,260.12	\$18,260.12
Replace smoke detector	15	16.20 Ea.	\$4,604.64	\$5,499.28	3.3333	3	3	\$16,497.85	\$16,497.85
Repair heat detector	10	16.20 Ea.	\$994.32	\$1,221.23	5.0000	5	5	\$6,106.15	\$6,106.15
Check operation heat detector	1	18.00 Ea.	\$291.50	\$365.20	50.0000	50	50	\$18,260.12	\$18,260.12
Replace heat detector	15	16.20 Ea.	\$2,769.62	\$3,386.46	3.3333	3	3	\$10,159.38	\$10,159.38
Check and repair manual pull station	10	16.20 Ea.	\$1,420.69	\$1,746.85	5.0000	5	4	\$8,734.25	\$6,987.40
Replace manual pull station	15	5.40 Ea.	\$1,098.73	\$1,322.68	3.3333	3	3	\$3,968.05	\$3,968.05
Minor repairs to fire alarm control panel	5	0.90 Ea.	\$134.74	\$164.05	10.0000	10	10	\$1,640.47	\$1,640.47
Maintenance and inspection fire alarm control panel	0.5	1.00 Ea.	\$43.18	\$54.10	100.0000	100	100	\$5,410.41	\$5,410.41
Replace fire alarm control panel	15	0.90 Ea.	\$1,758.12	\$2,152.73	3.3333	3	3	\$6,458.19	\$6,458.19

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Minor repairs to annunciation panel	5	0.90 Ea.	\$134.74	\$164.05	10.0000	10	10	\$1,640.47	\$1,640.47	
Maintenance and inspection annunciation panel	0.5	1.00 Ea.	\$43.18	\$54.10	100.0000	100	100	\$5,410.41	\$5,410.41	
Replace annunciation panel	15	0.90 Ea.	\$1,013.86	\$1,219.10	3.3333	3	3	\$3,657.29	\$3,657.29	
Replace fire alarm bell, 6"	20	5.40 Ea.	\$1,052.79	\$1,270.49	2.5000	2	2	\$2,540.97	\$2,540.97	
Replace lamp emergency lighting fixture	2	10.00 Ea.	\$546.89	\$658.76	25.0000	25	25	\$16,468.91	\$16,468.91	
Replace emergency lighting fixture	20	10.00 Ea.	\$6,023.68	\$7,097.61	2.5000	2	2	\$14,195.23	\$14,195.23	
Maintenance and repair exit light	20	8.00 Ea.	\$297.61	\$368.03	2.5000	2	2	\$736.05	\$736.05	
Replace lamp exit light	5	7.20 Ea.	\$121.29	\$143.74	10.0000	10	10	\$1,437.37	\$1,437.37	
Replace lighting fixture exit light	20	8.00 Ea.	\$1,528.28	\$1,838.09	2.5000	2	2	\$3,676.17	\$3,676.17	
			\$496,404.67	\$583,662.00				MR Subtotal	\$1,856,881.53	
									MR Per Year	\$37,137.63
									PM Total	\$7,211.21
									Subtotal	\$44,348.84
									Total Per Unit	\$6.44

FAC 7417 RECREATION CENTER

SUC \$6.44

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 50

Type PM

Average Size 6884.0

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Door, emergency egress, swinging, annualized	3.00	0.78	\$43.78	\$32.25	\$0.00	\$76.02	\$90.08	\$106.32
Urinals, annualized	4.00	0.91	\$25.27	\$45.81	\$0.00	\$71.09	\$87.36	\$104.89
Toilet (vacuum breaker type), annualized	9.00	1.59	\$75.98	\$80.08	\$0.00	\$156.06	\$187.68	\$223.10
Lavatories, annualized	8.00	2.78	\$47.72	\$165.63	\$0.00	\$213.35	\$267.81	\$324.65
Drink fountain, annualized	4.00	2.48	\$82.90	\$125.10	\$0.00	\$208.00	\$253.82	\$303.79
Fan coil unit, annualized	2.00	6.68	\$226.46	\$336.54	\$0.00	\$563.01	\$686.62	\$821.55
VAV Boxes, annualized	2.00	1.87	\$19.21	\$112.77	\$0.00	\$131.98	\$167.73	\$204.44
Hood and blower, annualized	1.00	2.32	\$54.09	\$116.29	\$0.00	\$170.38	\$210.68	\$253.68
Forced air heater, oil or gas fired, over 120 MBH, annualized	1.00	7.41	\$211.30	\$444.91	\$0.00	\$656.20	\$810.81	\$975.97
Package unit, air cooled, 3 thru 24 ton, annualized	1.00	2.40	\$176.92	\$144.48	\$0.00	\$321.41	\$382.45	\$452.33
Extinguishing system, wet pipe, annualized	1.00	11.34	\$68.24	\$678.37	\$0.00	\$746.61	\$956.95	\$1,170.70
Panelboard, 225 A and above, annualized	1.00	0.44	\$23.20	\$29.01	\$0.00	\$52.21	\$63.23	\$75.41
Fire alarm annunciator system, annualized	1.00	11.05	\$179.39	\$652.68	\$0.00	\$832.07	\$1,045.82	\$1,268.53
Light, emergency, dry cell, annualized	12.00	4.27	\$414.46	\$254.86	\$0.00	\$669.32	\$787.22	\$925.85
						\$4,867.71	\$5,998.23	\$7,211.21

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Modeled Component List
CostWorks Release 2021 Qtr 3

B20 Exterior Enclosure		
Steel Frame, Operating, 1st floor		32.0 Ea.
Glazed Wood		0.9 Ea.
Steel, Painted		3.6 Ea.
Lockset, Brass		3.6 Ea.
Door Closer, Brass		4.0 Ea.
B30 Roofing		
Modified Bituminous / Thermoplastic		69.0 Sq.
C10 Interior Construction		
Solid Core Interior Doors		13.0 Ea.
Panic Bar		4.0 Ea.
C30 Interior Finishes		
Tile		0.6 C.S.F.
Quarry Tile		1377.0 S.F.
Carpet		550.8 S.Y.
Acoustic Tile, fire-rated		62.1 C.S.F.
D20 Plumbing		
Tankless Water Closet		8.1 Ea.
Urinal		4.0 Ea.
Lavatory, Vitreous China		8.0 Ea.
Sink, Iron Enamel		1.0 Ea.
Sink, Stainless Steel		3.0 Ea.
Drinking Fountain		4.0 Ea.
Water Heater, Electric, 120 Gallon		1.0 Ea.
Circulation Pump, 1/12 HP		1.0 Ea.
Drain: Roof, Scupper, Area		2.0 Ea.
D30 HVAC		
Fan Coil, 10 ton		2.0 Ea.
Single Zone Air Conditioner, 25 ton		1.0 Ea.
Residential Gas Furnace, 200 MBH		1.0 Ea.
VAV Box		2.0 Each
D40 Fire Protection		
Sprinkler System, Fire Suppression, sprinkler head		70.0 Ea.
D50 Electrical		
Motor Starter, Up To 600 V		0.9 Ea.
Load Center, 100 A, maintenance & inspection		1.0 Ea.
Circuit Breaker, molded case, 240 V, 1 pole		42.0 Ea.
Smoke Detector		16.2 Ea.
Heat Detector		16.2 Ea.
Manual Pull Station		5.4 Ea.
Fire Alarm Control Panel		0.9 Ea.
Annunciation Panel		0.9 Ea.
Fire Alarm Bell		5.4 Ea.
Emergency Lighting Fixture		10.0 Ea.
Exit Light		8.0 Ea.

FAC 7417 RECREATION CENTER
Sustainment by Year
CostWorks Release 2021 Qtr 3

