

FAC 6200 ADMINISTRATIVE STRUCTURE, UNDERGROUND

FY22 SUC: \$3.65 / SF
Source: Calculated using R.S. Means CostWorks 2021 Qtr 3 component prices

FAC 6200 ADMINISTRATIVE STRUCTURE, UNDERGROUND

SUC \$3.65

Release 2021 Qtr 3
Zip Code Prefix 222
Type MR

UM SF
Design Life 45
Average Size 13910.0

Adjusted Occurences 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
Replace EMS, Mech, BTU, 3 Meters, 3 Duct Sensors, 3 Space Sensors	20	1.00 Ea.	\$17,137.72	\$20,030.68	2.2500	2	2	\$40,061.35	\$40,061.35
Replace EMS, Three Phase, 5 Meters	15	1.00 Ea.	\$15,802.46	\$18,399.79	3.0000	3	3	\$55,199.37	\$55,199.37
Clean & service water heater, gas / oil, 70 gallon	1	1.00 Ea.	\$196.62	\$245.89	45.0000	45	45	\$11,065.00	\$11,065.00
Check / minor repairs drinking fountain	1	4.00 Ea.	\$195.53	\$244.53	45.0000	45	45	\$11,003.87	\$11,003.87
Replace terminal reheat, 18" x 24" coil	15	2.00 Ea.	\$4,018.01	\$4,624.74	3.0000	3	3	\$13,874.23	\$13,874.23
Replace water heater, gas / oil, 70 gallon	12	1.00 Ea.	\$3,315.17	\$3,847.40	3.7500	3	3	\$11,542.21	\$11,542.21
Repair smoke detector	10	35.00 Ea.	\$1,973.57	\$2,439.99	4.5000	4	3	\$9,759.97	\$7,319.98
Maintenance and repair incandescent lighting fixtures	10	26.00 Ea.	\$1,790.51	\$2,131.61	4.5000	4	4	\$8,526.44	\$8,526.44
Unplug line urinal	5	5.00 Ea.	\$725.36	\$907.14	9.0000	9	9	\$8,164.26	\$8,164.26
Refinish concrete floor finished	25	15.21 C.S.F.	\$6,415.99	\$7,706.61	1.8000	1	1	\$7,706.61	\$7,706.61
Rebuild flush valve tankless water closet	20	16.00 Ea.	\$2,886.94	\$3,479.31	2.2500	2	2	\$6,958.63	\$6,958.63
Replace washer in faucet lavatory, vitreous china	2	18.00 Ea.	\$231.93	\$288.93	22.5000	22	22	\$6,356.52	\$6,356.52
Replace wall-hung urinal	35	5.00 Ea.	\$4,844.32	\$5,845.53	1.2857	1	1	\$5,845.53	\$5,845.53
Replace tankless flush valve	25	16.00 Ea.	\$4,035.44	\$4,737.77	1.8000	1	1	\$4,737.77	\$4,737.77
Maintenance and inspection circuit breaker, molded case, 600 V, 3 pole	0.33	1.00 Ea.	\$32.39	\$40.58	136.3636	136	136	\$5,518.61	\$5,518.61
Replace pump / motor assembly circulation pump, 1/12 HP	10	1.00 Ea.	\$1,100.58	\$1,290.00	4.5000	4	4	\$5,159.98	\$5,159.98
Correct water pressure drinking fountain	2	4.00 Ea.	\$167.29	\$209.21	22.5000	22	22	\$4,602.60	\$4,602.60
Replace metal stair railing, interior	45	72.00 L.F.	\$3,092.81	\$3,620.15	1.0000	1	1	\$3,620.15	\$3,620.15
Replace manual pull station	15	4.00 Ea.	\$813.87	\$979.76	3.0000	3	3	\$2,939.29	\$2,939.29
Refinish 3'-0" x 7'-0" steel painted interior door	4	4.00 Ea.	\$210.34	\$259.15	11.2500	11	11	\$2,850.60	\$2,850.60
Terrazzo floor repairs - (2% of floors)	15	45.64 S.F.	\$742.31	\$888.88	3.0000	3	3	\$2,666.65	\$2,666.65
Replace refrigerant drinking fountain	2	4.00 Ea.	\$130.73	\$153.08	22.5000	22	22	\$3,367.69	\$3,367.69
Replace incandescent lighting fixture lamp	5	26.00 Ea.	\$298.54	\$360.56	9.0000	9	9	\$3,245.04	\$3,245.04
Repair internal leaks drinking fountain	4	4.00 Ea.	\$180.32	\$225.51	11.2500	11	11	\$2,480.62	\$2,480.62
Replace lamp exit light	5	12.00 Ea.	\$202.16	\$239.56	9.0000	9	9	\$2,156.05	\$2,156.05
Unstop sink, iron enamel	2	2.00 Ea.	\$83.64	\$104.60	22.5000	22	22	\$2,301.30	\$2,301.30
Rebuild flush valve for a urinal	20	5.00 Ea.	\$902.17	\$1,087.29	2.2500	2	2	\$2,174.57	\$2,174.57
Replace flush valve diaphragm tankless water closet	10	16.00 Ea.	\$419.52	\$520.57	4.5000	4	4	\$2,082.30	\$2,082.30
Replace washer in spud connection lavatory, vitreous china	7	18.00 Ea.	\$296.33	\$361.44	6.4286	6	6	\$2,168.64	\$2,168.64

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Repair failed breaker, molded case, 600 V, 3 pole	10	1.00 Ea.	\$372.07	\$442.63	4.5000	4	4	\$1,770.52	\$1,770.52
Replace fire alarm bell, 6"	20	4.00 Ea.	\$779.85	\$941.10	2.2500	2	2	\$1,882.20	\$1,882.20
Repair drain leak drinking fountain	4	4.00 Ea.	\$135.66	\$162.14	11.2500	11	9	\$1,783.52	\$1,459.25
Inspect sprinkler system	1	1.00 Ea.	\$34.33	\$42.93	45.0000	45	45	\$1,931.79	\$1,931.79
Replace 3'-0" x 7'-0" steel, painted, door	45	2.00 Ea.	\$1,410.13	\$1,639.46	1.0000	1	1	\$1,639.46	\$1,639.46
Check and repair manual pull station	10	4.00 Ea.	\$350.79	\$431.32	4.5000	4	3	\$1,725.28	\$1,293.96
Overhaul water heater, gas / oil, 70 gallon	5	1.00 Ea.	\$163.70	\$204.73	9.0000	9	9	\$1,842.54	\$1,842.54
Replace faucets sink, iron enamel	10	2.00 Ea.	\$363.45	\$437.51	4.5000	4	4	\$1,750.04	\$1,750.04
Replace sink, P.E.C.I. sink, iron enamel kitchen	35	2.00 Ea.	\$1,273.40	\$1,515.02	1.2857	1	1	\$1,515.02	\$1,515.02
Maintenance and repair exit light	20	12.00 Ea.	\$446.42	\$552.04	2.2500	2	2	\$1,104.08	\$1,104.08
Repair circulator pump, 1 H.P.	5	1.00 Ea.	\$98.36	\$116.02	9.0000	9	6	\$1,044.15	\$696.10
Refinish 3'-0" x 7'-0" steel, painted, door	4	2.00 Ea.	\$82.80	\$101.73	11.2500	11	11	\$1,119.06	\$1,119.06
Replace flush valve diaphragm for a urinal	7	5.00 Ea.	\$131.10	\$162.68	6.4286	6	6	\$976.08	\$976.08
Repair terminal reheat, 18" x 24" coil	10	2.00 Ea.	\$207.48	\$259.47	4.5000	4	4	\$1,037.90	\$1,037.90
Repair concrete steps	15	12.20 S.F.	\$278.77	\$322.70	3.0000	3	3	\$968.09	\$968.09
Inspect / check pump / motor operation, lubricate circulation pump, 1/12 HP	0.5	1.00 Ea.	\$8.03	\$10.04	90.0000	90	90	\$903.54	\$903.54
Maintenance and inspection lighting panel, indoor	3	1.00 Ea.	\$40.64	\$50.92	15.0000	15	15	\$763.82	\$763.82
Replace faucet washer sink, iron enamel	2	2.00 Ea.	\$25.55	\$31.83	22.5000	22	22	\$700.30	\$700.30
Repair steel, painted, door	14	0.20 Ea.	\$125.01	\$148.80	3.2143	3	3	\$446.40	\$446.40
Remove old insulation & replace with new, pipe 3/4", wall 1"	15	16.00 L.F.	\$133.73	\$165.15	3.0000	3	3	\$495.46	\$495.46
Repair 5/8" drywall - (2% of walls)	20	100.00 S.F.	\$167.53	\$203.85	2.2500	2	2	\$407.70	\$407.70
Resolder joint pipe & fittings, copper	10	2.00 Ea.	\$89.19	\$110.56	4.5000	4	4	\$442.24	\$442.24
Clean trap sink, iron enamel	3	2.00 Ea.	\$17.14	\$21.44	15.0000	15	15	\$321.56	\$321.56
Repair steel painted interior door	14	0.40 Ea.	\$117.38	\$136.63	3.2143	3	3	\$409.88	\$409.88
Maintenance and repair computer ground system	4	1.00 Ea.	\$21.59	\$27.05	11.2500	11	11	\$297.57	\$297.57
Maintenance and repair special ground system	4	1.00 Ea.	\$21.59	\$27.05	11.2500	11	11	\$297.57	\$297.57
Unclog main drain pipe & fittings, cast iron	10	1.00 Ea.	\$46.17	\$57.74	4.5000	4	4	\$230.95	\$230.95
Replace vinyl tile flooring	18	0.47 S.Y.	\$23.22	\$28.51	2.5000	2	2	\$57.03	\$57.03
Replace 3'-0" x 7'-0" steel painted interior door	60	4.00 Ea.	\$4,872.14	\$5,648.33	0.7500	0	0	\$0.00	\$0.00
Replace concrete steps	100	122.00 S.F.	\$6,521.98	\$7,953.45	0.4500	0	0	\$0.00	\$0.00
Replace 5/8" drywall	75	5,000.00 S.F.	\$11,653.04	\$14,261.03	0.6000	0	0	\$0.00	\$0.00
Replace terrazzo floor	75	22.82 C.S.F.	\$35,509.01	\$42,399.81	0.6000	0	0	\$0.00	\$0.00
Replace circuit breaker molded case, 600 V, 3 pole circuit breaker	50	1.00 Ea.	\$5,188.92	\$5,939.49	0.9000	0	0	\$0.00	\$0.00
Replace computer ground system	50	1.00 M.L.F.	\$1,865.81	\$2,278.85	0.9000	0	0	\$0.00	\$0.00
Replace special ground system	50	1.00 M.L.F.	\$1,865.81	\$2,278.85	0.9000	0	0	\$0.00	\$0.00

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Replace central station A.H.U., 16,000 CFM	15	1.00 Ea.	\$66,939.65	\$77,045.08	3.0000	3	3	\$231,135.23	\$231,135.23	
Repair water cooled chiller, 50 ton, reciprocating	10	1.00 Ea.	\$45,520.89	\$52,632.05	4.5000	4	4	\$210,528.21	\$210,528.21	
Replace carpet	8	500.00 S.Y.	\$27,508.17	\$31,768.45	5.6250	5	5	\$158,842.26	\$158,842.26	
Replace fluorescent light fixture ballast, 80 W	10	238.00 Ea.	\$29,671.09	\$35,994.46	4.5000	4	4	\$143,977.85	\$143,977.85	
Replace chiller, water cooled 50 ton, reciprocating	20	1.00 Ea.	\$52,675.18	\$61,378.40	2.2500	2	2	\$122,756.80	\$122,756.80	
Replace receptacle/plug receptacles and plugs	20	400.00 Ea.	\$28,782.23	\$35,478.66	2.2500	2	2	\$70,957.31	\$70,957.31	
Refinish 3'-0" x 7'-0" hollow core wood door, interior	4	83.00 Ea.	\$3,599.27	\$4,419.72	11.2500	11	11	\$48,616.95	\$48,616.95	
Replace wiring devices, switches	15	200.00 Ea.	\$13,075.56	\$16,244.38	3.0000	3	3	\$48,733.14	\$48,733.14	
Refinish drywall	4	5,000.00 S.F.	\$3,104.91	\$3,819.55	11.2500	11	11	\$42,015.06	\$42,015.06	
Rebuild double check 3" backflow preventer sprinkler system	1	1.00 Ea.	\$710.41	\$851.09	45.0000	45	45	\$38,299.22	\$38,299.22	
Maintenance and repair receptacles and plugs	20	400.00 Ea.	\$16,897.37	\$21,095.44	2.2500	2	2	\$42,190.89	\$42,190.89	
Maintenance and repair wiring devices, switches	10	200.00 Ea.	\$8,448.69	\$10,547.72	4.5000	4	4	\$42,190.89	\$42,190.89	
Replace lamps (2 lamps), 4', 34 W energy saver	10	238.00 Ea.	\$6,000.94	\$7,515.79	4.5000	4	4	\$30,063.15	\$30,063.15	
Replace smoke detector	15	35.00 Ea.	\$9,948.31	\$11,881.17	3.0000	3	3	\$35,643.50	\$35,643.50	
Unplug clogged line tankless water closet	5	16.00 Ea.	\$3,494.32	\$4,370.03	9.0000	9	9	\$39,330.26	\$39,330.26	
Replace 3'-0" x 7'-0" hollow core wood door, interior	30	83.00 Ea.	\$25,064.97	\$29,539.16	1.5000	1	1	\$29,539.16	\$29,539.16	
Repair boiler, gas, 250 MBH	7	2.00 Ea.	\$4,062.11	\$4,780.90	6.4286	6	6	\$28,685.41	\$28,685.41	
Check operation smoke detector	1	35.00 Ea.	\$566.80	\$710.12	45.0000	45	45	\$31,955.21	\$31,955.21	
Replace emergency lighting fixture	20	12.00 Ea.	\$7,228.42	\$8,517.14	2.2500	2	2	\$17,034.28	\$17,034.28	
Replace fountain drinking fountain	10	4.00 Ea.	\$5,124.62	\$6,058.24	4.5000	4	4	\$24,232.94	\$24,232.94	
Replace wax ring gasket for tankless water closet	5	16.00 Ea.	\$2,264.31	\$2,829.22	9.0000	9	9	\$25,463.01	\$25,463.01	
Replace boiler, gas, 250 MBH	30	2.00 Ea.	\$18,796.09	\$22,420.25	1.5000	1	1	\$22,420.25	\$22,420.25	
Replace lamp emergency lighting fixture	2	12.00 Ea.	\$656.27	\$790.51	22.5000	22	22	\$17,391.17	\$17,391.17	
Replace circulator. pump, 1 H.P.	15	1.00 Ea.	\$5,768.48	\$6,613.79	3.0000	3	3	\$19,841.37	\$19,841.37	
Clean out strainer and P trap lavatory, vitreous china	2	18.00 Ea.	\$627.65	\$784.94	22.5000	22	22	\$17,268.73	\$17,268.73	
Replace tankless water closet	35	16.00 Ea.	\$20,579.54	\$23,815.92	1.2857	1	1	\$23,815.92	\$23,815.92	
Replace sprinkler head	20	80.00 Ea.	\$6,841.82	\$8,415.16	2.2500	2	2	\$16,830.32	\$16,830.32	
Replace lavatory, vitreous china	35	18.00 Ea.	\$12,106.34	\$14,547.98	1.2857	1	1	\$14,547.98	\$14,547.98	
Replace faucets lavatory, vitreous china	10	18.00 Ea.	\$3,271.07	\$3,937.60	4.5000	4	4	\$15,750.39	\$15,750.39	
Repair hollow core wood door, interior	7	8.30 Ea.	\$2,435.65	\$2,834.98	6.4286	6	6	\$17,009.89	\$17,009.89	
Repair central station A.H.U., 16,000 CFM	10	2.00 Ea.	\$3,005.64	\$3,492.07	4.5000	4	3	\$13,968.28	\$10,476.21	
			\$581,461.11	\$689,511.10				MR Subtotal	\$1,909,998.94	
									MR Per Year	\$42,338.18
									PM Total	\$8,487.04
									Subtotal	\$50,825.22
									Total Per Unit	\$3.65

FAC 6200 ADMINISTRATIVE STRUCTURE, UNDERGROUND

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 45

Type PM

Average Size 13910.0

SUC \$3.65

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Controls, central system, electro/pneumatic, annually	1.00	1.92	\$70.77	\$115.41	\$0.00	\$186.18	\$227.88	\$273.12
Door, emergency egress, swinging, annualized	4.00	1.04	\$58.37	\$43.00	\$0.00	\$101.37	\$120.10	\$141.76
Fire doors, swinging, annualized	4.00	1.57	\$57.28	\$58.23	\$0.00	\$115.52	\$138.71	\$164.77
Urinals, annualized	5.00	1.14	\$31.59	\$57.27	\$0.00	\$88.86	\$109.20	\$131.12
Toilet (vacuum breaker type), annualized	16.00	2.83	\$135.07	\$142.37	\$0.00	\$277.44	\$333.66	\$396.63
Lavatories, annualized	18.00	6.26	\$107.37	\$372.66	\$0.00	\$480.03	\$602.57	\$730.47
Drink fountain, annualized	4.00	2.48	\$82.90	\$125.10	\$0.00	\$208.00	\$253.82	\$303.79
Boiler, hot water, oil, gas, or comb. fired, 120 - 500 MBH, annualized	1.00	15.88	\$77.34	\$947.08	\$0.00	\$1,024.42	\$1,316.27	\$1,612.00
Package unit, air cooled, 25 thru 50 ton, annualized	1.00	3.25	\$176.92	\$195.58	\$0.00	\$372.51	\$448.87	\$534.09
Backflow prevention device, up to 4", annualized	1.00	0.33	\$13.40	\$19.82	\$0.00	\$33.22	\$40.50	\$48.46
Extinguishing system, wet pipe, annualized	1.00	11.34	\$68.24	\$678.37	\$0.00	\$746.61	\$956.95	\$1,170.70
Extinguishing system, FM200, annualized	1.00	9.26	\$611.65	\$462.52	\$0.00	\$1,074.18	\$1,274.10	\$1,504.61
Circuit breaker, high voltage air, annualized	1.00	0.47	\$15.16	\$31.08	\$0.00	\$46.24	\$57.08	\$68.67
Panelboard, 225 A and above, annualized	1.00	0.44	\$23.20	\$29.01	\$0.00	\$52.21	\$63.23	\$75.41
Light, emergency, hardwired system, annualized	40.00	10.00	\$309.30	\$590.52	\$0.00	\$899.82	\$1,107.91	\$1,331.46
						\$5,706.59	\$7,050.85	\$8,487.04

FAC 6200 ADMINISTRATIVE STRUCTURE, UNDERGROUND

Modeled Component List CostWorks Release 2021 Qtr 3

D30 HVAC

Terminal Reheat Coil, 18" x 24"	2.0 Ea.
Central Station Air Conditioning Air Handling Unit, 16,000 CFM	1.0 Ea.
Chiller, Water Cooled, Reciprocating, 50 ton	1.0 Ea.
Boiler, Gas, 250 MBH	2.0 Ea.
Circulator Pump, 1 H.P.	1.0 Ea.

D20 Plumbing

Water Heater, Gas / Oil, 70 Gallon	1.0 Ea.
Urinal	5.0 Ea.
Circulation Pump, 1/12 HP	1.0 Ea.
Sink, Iron Enamel	2.0 Ea.
Drinking Fountain	4.0 Ea.
Tankless Water Closet	16.0 Ea.
Lavatory, Vitreous China	18.0 Ea.

C30 Interior Finishes

Concrete, Finished	15.21 C.S.F.
Vinyl	0.47 S.Y.
Drywall	5000.0 S.F.
Terrazzo	22.82 C.S.F.
Carpet	500.0 S.Y.

C20 Stairs

Metal Interior Stair Railing	72.0 L.F.
Concrete Steps	122.0 S.F.

D50 Electrical

Manual Pull Station	4.0 Ea.
Fire Alarm Bell	4.0 Ea.
Load Center, 100 A, maintenance & inspection	1.0 Ea.
Circuit Breaker, molded case, 600 V, 3 pole	1.0 Ea.
Computer Ground System	1.0 M.L.F.
Special Ground System	1.0 M.L.F.
Smoke Detector	35.0 Ea.
Emergency Lighting Fixture	12.0 Ea.

B20 Exterior Enclosure

Steel, Painted	2.0 Ea.
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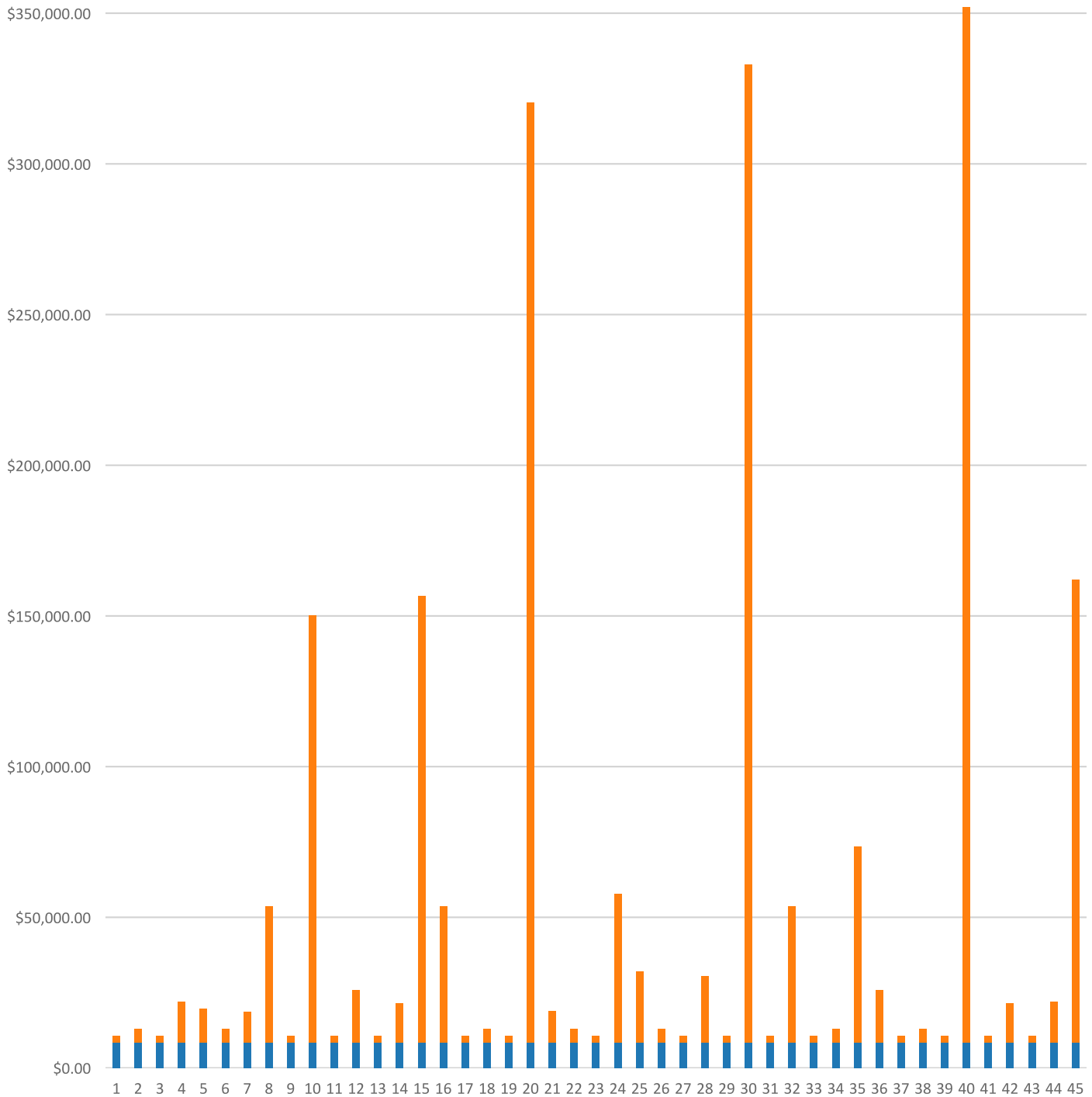
C10 Interior Construction

Steel Painted Interior Doors	4.0 Ea.
Hollow Core Interior Doors	83.0 Ea.
Fire Doors, Swinging, annualized	4.0 Each

D40 Fire Protection

Sprinkler System, Fire Suppression, 3" backflow preventer	1.0 Ea.
Sprinkler System, Fire Suppression, sprinkler head	80.0 Ea.
Extinguishing system, FM200	1.0 Each

FAC 6200 ADMINISTRATIVE STRUCTURE, UNDERGROUND
Sustainment by Year
CostWorks Release 2021 Qtr 3



PM Cost
MR Cost