

FAC 3171 ELECTRONIC AND COMMUNICATION RDTE FACILITY

FY24 SUC: \$7.38 / SF
Source: Calculated using R.S. Means CostWorks 2023 Qtr 4 component prices

FAC 3171 ELECTRONIC AND COMMUNICATION RDTE FACILITY

Release 2023 Qtr 4

Zip Code Prefix 222

Type MR

UM SF

Design Life 55

Average Size 13881.120242

SUC \$7.38

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 |
|---|-----------|--------------|----------------|---------------|-----------------------|----------------------------|----------------------|--------------|---------------|
| Minor repairs to concrete floor unfinished | 15 | 234.00 S.F. | \$8,923.31 | \$10,889.64 | 3.6667 | 3 | 3 | \$32,668.91 | \$32,668.91 |
| Refinish concrete steps | 3 | 32.00 S.F. | \$52.05 | \$64.22 | 18.3333 | 18 | 18 | \$1,155.90 | \$1,155.90 |
| Refinish metal hand rail | 7 | 12.00 L.F. | \$24.56 | \$30.29 | 7.8571 | 7 | 7 | \$212.04 | \$212.04 |
| Waterproof concrete block wall, 1st floor | 10 | 52.40 C.S.F. | \$13,544.17 | \$16,066.44 | 5.5000 | 5 | 5 | \$80,332.22 | \$80,332.22 |
| Point and refinish painted concrete block wall, 1st floor | 25 | 52.40 C.S.F. | \$27,087.11 | \$33,384.70 | 2.2000 | 2 | 2 | \$66,769.40 | \$66,769.40 |
| Replace glass - 1st floor (1% of glass) - alum. window fixed | 1 | 5.20 S.F. | \$68.38 | \$80.29 | 55.0000 | 55 | 55 | \$4,415.98 | \$4,415.98 |
| Repair 2'-0" x 3'-0" aluminum window - 1st floor | 20 | 64.00 Ea. | \$10,004.05 | \$11,921.37 | 2.7500 | 2 | 2 | \$23,842.74 | \$23,842.74 |
| Replace 2'-0" x 3'-0" aluminum window - 1st floor | 50 | 64.00 Ea. | \$43,362.58 | \$50,899.39 | 1.1000 | 1 | 1 | \$50,899.39 | \$50,899.39 |
| Repair aluminum storefront door | 12 | 2.00 Ea. | \$1,020.45 | \$1,219.37 | 4.5833 | 4 | 4 | \$4,877.48 | \$4,877.48 |
| Replace insulating glass - (3% of glass) aluminum storefront door | 1 | 1.20 S.F. | \$66.70 | \$78.00 | 55.0000 | 55 | 55 | \$4,290.23 | \$4,290.23 |
| Repair steel, painted, door | 14 | 4.00 Ea. | \$2,809.34 | \$3,336.77 | 3.9286 | 3 | 3 | \$10,010.31 | \$10,010.31 |
| Refinish 3'-0" x 7'-0" steel, painted, door | 4 | 4.00 Ea. | \$184.22 | \$225.58 | 13.7500 | 13 | 13 | \$2,932.60 | \$2,932.60 |
| Replace 3'-0" x 7'-0" steel, painted, door | 45 | 4.00 Ea. | \$3,668.44 | \$4,247.70 | 1.2222 | 1 | 1 | \$4,247.70 | \$4,247.70 |
| Replace tempered glass - (3% of glass) steel painted door | 1 | 1.89 S.F. | \$59.98 | \$70.81 | 55.0000 | 55 | 55 | \$3,894.35 | \$3,894.35 |
| Repair 12' x 12' steel roll-up door | 10 | 1.00 Ea. | \$701.12 | \$833.22 | 5.5000 | 5 | 5 | \$4,166.12 | \$4,166.12 |
| Replace 12' x 12' steel roll-up door | 35 | 1.00 Ea. | \$2,804.46 | \$3,332.89 | 1.5714 | 1 | 1 | \$3,332.89 | \$3,332.89 |
| Debris removal and visual inspection of built-up roofing | 0.5 | 15.30 M.S.F. | \$619.96 | \$756.17 | 110.0000 | 110 | 110 | \$83,178.98 | \$83,178.98 |
| Minor BUR membrane repairs, 2% of roof area | 1 | 2.40 Sq. | \$1,276.82 | \$1,513.92 | 55.0000 | 55 | 55 | \$83,265.78 | \$83,265.78 |
| BUR flashing repairs, 2 S.F. per sq. repaired | 1 | 2.40 S.F. | \$9.09 | \$11.04 | 55.0000 | 55 | 55 | \$607.14 | \$607.14 |
| Minor BUR membrane replacement, 25% of roof area | 15 | 29.70 Sq. | \$27,177.75 | \$32,185.30 | 3.6667 | 3 | 3 | \$96,555.91 | \$96,555.91 |
| Total BUR roof replacement | 28 | 119.00 Sq. | \$104,148.87 | \$122,966.08 | 1.9643 | 1 | 1 | \$122,966.08 | \$122,966.08 |
| Replace Roof edges, aluminum, duranodic, .050" thick, 6" face | 25 | 490.00 L.F. | \$23,243.09 | \$27,072.41 | 2.2000 | 2 | 2 | \$54,144.83 | \$54,144.83 |
| Replace aluminum gutter, enameled, 5" K type, .027 " thick | 40 | 490.00 L.F. | \$5,057.03 | \$6,109.31 | 1.3750 | 1 | 1 | \$6,109.31 | \$6,109.31 |
| Replace aluminum downspout, 3" x 4", .024" thick | 25 | 96.00 L.F. | \$850.39 | \$1,027.05 | 2.2000 | 2 | 2 | \$2,054.10 | \$2,054.10 |
| Repair steel painted interior door | 14 | 4.00 Ea. | \$1,115.95 | \$1,302.73 | 3.9286 | 3 | 3 | \$3,908.19 | \$3,908.19 |
| Refinish 3'-0" x 7'-0" steel painted interior door | 4 | 4.00 Ea. | \$230.61 | \$283.51 | 13.7500 | 13 | 13 | \$3,685.62 | \$3,685.62 |
| Replace 3'-0" x 7'-0" steel painted interior door | 60 | 4.00 Ea. | \$5,118.19 | \$5,935.67 | 0.9167 | 0 | 0 | \$0.00 | \$0.00 |
| Safety glass replacement, (3% of glass) steel painted interior door | 1 | 1.89 S.F. | \$47.15 | \$55.58 | 55.0000 | 55 | 55 | \$3,056.99 | \$3,056.99 |
| Repair solid core wood door, interior | 11 | 18.00 Ea. | \$5,021.79 | \$5,862.28 | 5.0000 | 5 | 5 | \$29,311.40 | \$29,311.40 |
| Refinish 3'-0" x 7'-0" solid core wood door, interior | 4 | 18.00 Ea. | \$792.27 | \$976.28 | 13.7500 | 13 | 12 | \$12,691.64 | \$11,715.36 |

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| Replace 3'-0" x 7'-0" solid core wood door, interior | 40 | 18.00 Ea. | \$10,197.90 | \$11,773.76 | 1.3750 | 1 | 1 | \$11,773.76 | \$11,773.76 |
| Replace brass lockset interior | 30 | 28.00 Ea. | \$7,386.78 | \$8,616.56 | 1.8333 | 1 | 1 | \$8,616.56 | \$8,616.56 |
| Repair 5/8" drywall - (2% of walls) | 20 | 44.00 S.F. | \$73.52 | \$89.85 | 2.7500 | 2 | 2 | \$179.69 | \$179.69 |
| Refinish drywall | 4 | 2,200.00 S.F. | \$1,490.81 | \$1,831.45 | 13.7500 | 13 | 13 | \$23,808.89 | \$23,808.89 |
| Repair 4" x 4" thin set ceramic tile - (2% of walls) | 10 | 22.80 C.S.F. | \$18,352.18 | \$22,222.13 | 5.5000 | 5 | 5 | \$111,110.64 | \$111,110.64 |
| Refinish concrete floor finished | 25 | 35.70 C.S.F. | \$14,871.81 | \$17,943.49 | 2.2000 | 2 | 2 | \$35,886.97 | \$35,886.97 |
| Replace vinyl sheet flooring | 18 | 943.00 S.Y. | \$81,676.83 | \$98,384.50 | 3.0556 | 3 | 3 | \$295,153.49 | \$295,153.49 |
| Replace rubber tile floor | 18 | 132.00 S.Y. | \$13,188.28 | \$16,182.32 | 3.0556 | 3 | 3 | \$48,546.97 | \$48,546.97 |
| Replace carpet | 8 | 89.00 S.Y. | \$4,805.69 | \$5,557.38 | 6.8750 | 6 | 6 | \$33,344.28 | \$33,344.28 |
| Replace acoustic tile ceiling, fire-rated | 20 | 79.30 C.S.F. | \$41,309.59 | \$48,824.80 | 2.7500 | 2 | 2 | \$97,649.59 | \$97,649.59 |
| Replace flush valve diaphragm tankless water closet | 10 | 6.00 Ea. | \$163.58 | \$203.14 | 5.5000 | 5 | 5 | \$1,015.68 | \$1,015.68 |
| Rebuild flush valve tankless water closet | 20 | 6.00 Ea. | \$1,151.29 | \$1,387.61 | 2.7500 | 2 | 2 | \$2,775.23 | \$2,775.23 |
| Unplug clogged line tankless water closet | 5 | 6.00 Ea. | \$1,379.57 | \$1,726.99 | 11.0000 | 11 | 11 | \$18,996.89 | \$18,996.89 |
| Replace flush valve diaphragm for a urinal | 7 | 4.00 Ea. | \$109.06 | \$135.42 | 7.8571 | 7 | 7 | \$947.97 | \$947.97 |
| Check / minor repairs drinking fountain | 1 | 2.00 Ea. | \$103.05 | \$129.00 | 55.0000 | 55 | 55 | \$7,095.01 | \$7,095.01 |
| Replace threaded steel pipe and fittings, 3/4" | 75 | 28.00 L.F. | \$690.12 | \$838.54 | 0.7333 | 0 | 0 | \$0.00 | \$0.00 |
| Replace pump / motor assembly circulation pump, 1/12 HP | 10 | 2.00 Ea. | \$2,437.82 | \$2,853.79 | 5.5000 | 5 | 5 | \$14,268.94 | \$14,268.94 |
| General maintenance & repair drain: roof, scupper, area | 1 | 4.00 Ea. | \$156.72 | \$196.19 | 55.0000 | 55 | 55 | \$10,790.33 | \$10,790.33 |
| Replace pipe and fittings, copper 3/4" | 20 | 136.00 L.F. | \$3,399.61 | \$4,120.25 | 2.7500 | 2 | 2 | \$8,240.50 | \$8,240.50 |
| Inspect / check pump / motor operation, lubricate circulation pump, 1/12 HP | 0.5 | 2.00 Ea. | \$16.87 | \$21.12 | 110.0000 | 110 | 110 | \$2,323.62 | \$2,323.62 |
| Clean out bucket floor drain with bucket | 5 | 1.00 Ea. | \$309.15 | \$387.00 | 11.0000 | 11 | 11 | \$4,257.01 | \$4,257.01 |
| Replace 10' of buried 4" diam steel pipe/M.L.F. natural gas | 12 | 1.00 Ea. | \$917.35 | \$1,119.74 | 4.5833 | 4 | 4 | \$4,478.96 | \$4,478.96 |
| Repair boiler, gas, 2000 MBH | 7 | 1.00 Ea. | \$5,734.80 | \$6,685.15 | 7.8571 | 7 | 7 | \$46,796.03 | \$46,796.03 |
| Replace boiler, gas, 2000 MBH | 30 | 1.00 Ea. | \$40,588.94 | \$47,558.43 | 1.8333 | 1 | 1 | \$47,558.43 | \$47,558.43 |
| Repair fan coil unit, 30 ton | 10 | 3.00 Ea. | \$6,662.73 | \$7,685.06 | 5.5000 | 5 | 4 | \$38,425.32 | \$30,740.26 |
| Replace fan coil unit, 30 ton | 15 | 4.00 Ea. | \$62,213.09 | \$72,533.03 | 3.6667 | 3 | 3 | \$217,539.09 | \$217,539.09 |
| Repair fan, induced draft, 6700 CFM | 10 | 1.00 Ea. | \$319.19 | \$389.67 | 5.5000 | 5 | 5 | \$1,948.36 | \$1,948.36 |
| Replace fan, induced draft, 6700 CFM | 20 | 1.00 Ea. | \$6,607.03 | \$7,612.34 | 2.7500 | 2 | 2 | \$15,224.67 | \$15,224.67 |
| Replace fan & motor, propeller exhaust, 1000 CFM exhaust fan | 15 | 1.00 Ea. | \$922.61 | \$1,086.64 | 3.6667 | 3 | 3 | \$3,259.92 | \$3,259.92 |
| Maintenance and repair explosionproof industrial heater | 2 | 2.00 Ea. | \$424.73 | \$496.34 | 27.5000 | 27 | 26 | \$13,401.16 | \$12,904.82 |
| Replace heater explosionproof industrial heater | 15 | 2.00 Ea. | \$12,353.56 | \$14,115.60 | 3.6667 | 3 | 3 | \$42,346.81 | \$42,346.81 |
| Repair computer room A/C, chilled water, 5 ton | 10 | 1.00 Ea. | \$8,542.57 | \$9,995.14 | 5.5000 | 5 | 3 | \$49,975.68 | \$29,985.41 |
| Replace computer room A/C, chilled water, 5 ton | 20 | 1.00 Ea. | \$27,777.49 | \$31,867.75 | 2.7500 | 2 | 2 | \$63,735.51 | \$63,735.51 |

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| Repair single zone rooftop unit, 60 ton | 10 | 1.00 Ea. | \$79,616.79 | \$93,003.20 | 5.5000 | 5 | 4 | \$465,016.02 | \$372,012.81 |
| Replace single zone rooftop unit, 60 ton | 15 | 1.00 Ea. | \$95,941.66 | \$112,197.55 | 3.6667 | 3 | 3 | \$336,592.65 | \$336,592.65 |
| Inspect sprinkler system | 1 | 1.00 Ea. | \$36.17 | \$45.28 | 55.0000 | 55 | 55 | \$2,490.64 | \$2,490.64 |
| Replace sprinkler head | 20 | 60.00 Ea. | \$5,258.87 | \$6,489.11 | 2.7500 | 2 | 2 | \$12,978.23 | \$12,978.23 |
| Rebuild double check 3" backflow preventer sprinkler system | 1 | 1.00 Ea. | \$748.17 | \$896.73 | 55.0000 | 55 | 55 | \$49,320.09 | \$49,320.09 |
| Repair 15 KV primary transformer, dry | 15 | 1.00 Ea. | \$235.84 | \$287.87 | 3.6667 | 3 | 3 | \$863.62 | \$863.62 |
| Maintenance and inspection primary transformer, dry | 0.5 | 1.00 Ea. | \$42.34 | \$53.05 | 110.0000 | 110 | 110 | \$5,835.62 | \$5,835.62 |
| Replace fuse | 25 | 36.00 Ea. | \$16,448.21 | \$18,888.08 | 2.2000 | 2 | 2 | \$37,776.16 | \$37,776.16 |
| Repair switchboard meter | 10 | 4.00 Ea. | \$4,874.48 | \$5,736.50 | 5.5000 | 5 | 5 | \$28,682.48 | \$28,682.48 |
| Maintenance and repair rectifier, up to 600 V | 2 | 2.00 Ea. | \$1,341.86 | \$1,604.06 | 27.5000 | 27 | 25 | \$43,309.63 | \$40,101.51 |
| Replace rectifier, up to 600 V | 20 | 2.00 Ea. | \$2,382.70 | \$2,749.29 | 2.7500 | 2 | 2 | \$5,498.58 | \$5,498.58 |
| Maintenance and repair motor starter, up to 600 V | 5 | 4.00 Ea. | \$1,051.28 | \$1,277.98 | 11.0000 | 11 | 11 | \$14,057.74 | \$14,057.74 |
| Maintenance and repair secondary transformer, dry | 10 | 4.00 Ea. | \$1,016.41 | \$1,214.50 | 5.5000 | 5 | 5 | \$6,072.50 | \$6,072.50 |
| Maintenance and inspection secondary transformer, dry | 0.5 | 4.00 Ea. | \$341.28 | \$427.58 | 110.0000 | 110 | 110 | \$47,033.40 | \$47,033.40 |
| Maintenance and inspection lighting panel, indoor | 3 | 4.00 Ea. | \$169.38 | \$212.20 | 18.3333 | 18 | 18 | \$3,819.68 | \$3,819.68 |
| Replace load center, 100 A | 20 | 4.00 Ea. | \$4,724.12 | \$5,762.14 | 2.7500 | 2 | 2 | \$11,524.28 | \$11,524.28 |
| Replace EMT conduit, 1" diameter | 50 | 0.70 M.L.F. | \$7,881.11 | \$9,493.17 | 1.1000 | 1 | 1 | \$9,493.17 | \$9,493.17 |
| Maintenance and repair breaker, molded case, 480 V, 1 pole | 20 | 8.00 Ea. | \$606.72 | \$760.14 | 2.7500 | 2 | 2 | \$1,520.27 | \$1,520.27 |
| Maintenance and repair breaker, enclosed, 240 V, 1 pole | 25 | 64.00 Ea. | \$4,853.78 | \$6,081.09 | 2.2000 | 2 | 2 | \$12,162.17 | \$12,162.17 |
| Maintenance and repair breaker, enclosed, 240 V, 2 pole | 25 | 64.00 Ea. | \$4,853.78 | \$6,081.09 | 2.2000 | 2 | 2 | \$12,162.17 | \$12,162.17 |
| Maintenance and repair safety switch general, 2 pole | 8 | 6.00 Ea. | \$254.07 | \$318.31 | 6.8750 | 6 | 6 | \$1,909.84 | \$1,909.84 |
| Maintenance and inspection safety switch, 2 pole | 1 | 6.00 Ea. | \$254.07 | \$318.31 | 55.0000 | 55 | 55 | \$17,506.87 | \$17,506.87 |
| Replace 4-pin receptacle | 20 | 112.00 Ea. | \$17,127.74 | \$20,369.55 | 2.7500 | 2 | 2 | \$40,739.09 | \$40,739.09 |
| Rebuild flush valve for a urinal | 20 | 4.00 Ea. | \$767.52 | \$925.08 | 2.7500 | 2 | 2 | \$1,850.15 | \$1,850.15 |
| Unclog main drain pipe & fittings, cast iron | 10 | 4.00 Ea. | \$195.36 | \$244.56 | 5.5000 | 5 | 5 | \$1,222.81 | \$1,222.81 |
| Unclog floor drain, PVC | 20 | 4.00 Ea. | \$201.81 | \$252.63 | 2.7500 | 2 | 2 | \$505.25 | \$505.25 |
| Maintenance and repair lightning ground rod | 1 | 4.00 Ea. | \$369.13 | \$461.29 | 55.0000 | 55 | 53 | \$25,370.74 | \$24,448.17 |
| Replace lightning ground rod | 25 | 4.00 Ea. | \$982.42 | \$1,214.69 | 2.2000 | 2 | 2 | \$2,429.37 | \$2,429.37 |
| Maintenance and repair computer ground system | 4 | 1.00 Ea. | \$22.69 | \$28.43 | 13.7500 | 13 | 13 | \$369.54 | \$369.54 |
| Replace computer ground system | 50 | 0.80 M.L.F. | \$1,940.44 | \$2,338.51 | 1.1000 | 1 | 1 | \$2,338.51 | \$2,338.51 |
| Maintenance and inspection generator, diesel, 750 KW | 0.08 | 1.00 Ea. | \$68.26 | \$85.52 | 687.5000 | 687 | 687 | \$58,748.99 | \$58,748.99 |
| Replace diesel generator component, 750 KW | 25 | 1.00 Ea. | \$241,760.49 | \$276,884.97 | 2.2000 | 2 | 2 | \$553,769.95 | \$553,769.95 |
| Maintenance and repair transfer switch | 5 | 1.00 Ea. | \$356.92 | \$432.10 | 11.0000 | 11 | 11 | \$4,753.08 | \$4,753.08 |
| Replace transfer switch | 18 | 1.00 Ea. | \$24,947.43 | \$28,585.89 | 3.0556 | 3 | 3 | \$85,757.67 | \$85,757.67 |
| Replace lamp emergency lighting fixture | 2 | 8.00 Ea. | \$435.94 | \$526.84 | 27.5000 | 27 | 27 | \$14,224.69 | \$14,224.69 |

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| Replace emergency lighting fixture | 20 | 8.00 Ea. | \$4,598.45 | \$5,438.99 | 2.7500 | 2 | 2 | \$10,877.98 | \$10,877.98 |
| Maintenance and repair exit light | 20 | 8.00 Ea. | \$307.92 | \$381.36 | 2.7500 | 2 | 2 | \$762.73 | \$762.73 |
| Replace lamp exit light | 5 | 8.00 Ea. | \$130.77 | \$155.51 | 11.0000 | 11 | 11 | \$1,710.60 | \$1,710.60 |
| Maintenance and inspection UPS battery | 0.17 | 1.00 Ea. | \$68.26 | \$85.52 | 323.5294 | 323 | 323 | \$27,621.43 | \$27,621.43 |
| Maintenance and repair voice/data outlet | 10 | 24.00 Ea. | \$1,303.76 | \$1,628.20 | 5.5000 | 5 | 5 | \$8,140.99 | \$8,140.99 |
| Maintenance and inspection patch panel | 0.5 | 4.00 Ea. | \$364.03 | \$456.08 | 110.0000 | 110 | 110 | \$50,168.95 | \$50,168.95 |
| Replace patch panel | 15 | 4.00 Ea. | \$3,545.61 | \$4,267.22 | 3.6667 | 3 | 3 | \$12,801.67 | \$12,801.67 |
| Clean & service water heater, gas / oil, 70 gallon | 1 | 2.00 Ea. | \$412.20 | \$516.00 | 55.0000 | 55 | 55 | \$28,380.04 | \$28,380.04 |
| Maintenance and repair contactors and relays | 3 | 8.00 Ea. | \$2,090.76 | \$2,582.60 | 18.3333 | 18 | 18 | \$46,486.74 | \$46,486.74 |
| Replace wiring devices, switches | 15 | 18.00 Ea. | \$1,200.26 | \$1,494.12 | 3.6667 | 3 | 3 | \$4,482.37 | \$4,482.37 |
| Replace fluorescent light fixture ballast, 80 W | 10 | 66.00 Ea. | \$6,904.01 | \$8,513.39 | 5.5000 | 5 | 5 | \$42,566.96 | \$42,566.96 |
| Replace lamps (2 lamps), 4', 34 W energy saver | 10 | 66.00 Ea. | \$1,748.06 | \$2,189.15 | 5.5000 | 5 | 5 | \$10,945.75 | \$10,945.75 |
| Maintenance and repair TV cable outlet | 10 | 12.00 Ea. | \$651.88 | \$814.10 | 5.5000 | 5 | 5 | \$4,070.50 | \$4,070.50 |
| Repair smoke detector | 10 | 16.00 Ea. | \$928.16 | \$1,149.32 | 5.5000 | 5 | 4 | \$5,746.60 | \$4,597.28 |
| Check operation smoke detector | 1 | 16.00 Ea. | \$272.01 | \$340.79 | 55.0000 | 55 | 55 | \$18,743.68 | \$18,743.68 |
| Replace smoke detector | 15 | 16.00 Ea. | \$4,840.84 | \$5,779.49 | 3.6667 | 3 | 3 | \$17,338.48 | \$17,338.48 |
| Repair heat detector | 10 | 12.00 Ea. | \$751.24 | \$924.63 | 5.5000 | 5 | 5 | \$4,623.13 | \$4,623.13 |
| Check and repair manual pull station | 10 | 4.00 Ea. | \$359.53 | \$442.99 | 5.5000 | 5 | 4 | \$2,214.94 | \$1,771.95 |
| Replace manual pull station | 15 | 4.00 Ea. | \$835.03 | \$1,007.05 | 3.6667 | 3 | 3 | \$3,021.15 | \$3,021.15 |
| Minor repairs to fire alarm control panel | 5 | 1.00 Ea. | \$149.42 | \$182.60 | 11.0000 | 11 | 11 | \$2,008.55 | \$2,008.55 |
| Maintenance and inspection fire alarm control panel | 0.5 | 1.00 Ea. | \$45.50 | \$57.01 | 110.0000 | 110 | 110 | \$6,271.12 | \$6,271.12 |
| Replace fire alarm control panel | 15 | 1.00 Ea. | \$2,196.12 | \$2,675.47 | 3.6667 | 3 | 3 | \$8,026.42 | \$8,026.42 |
| Minor repairs to annunciation panel | 5 | 2.00 Ea. | \$298.83 | \$365.19 | 11.0000 | 11 | 11 | \$4,017.10 | \$4,017.10 |
| Maintenance and inspection annunciation panel | 0.5 | 2.00 Ea. | \$91.01 | \$114.02 | 110.0000 | 110 | 110 | \$12,542.24 | \$12,542.24 |
| Replace fire alarm bell, 6" | 20 | 4.00 Ea. | \$722.42 | \$879.09 | 2.7500 | 2 | 2 | \$1,758.17 | \$1,758.17 |
| Maintenance and repair building structure ground | 7 | 1.10 M.L.F. | \$101.51 | \$126.85 | 7.8571 | 7 | 7 | \$887.98 | \$887.98 |
| Replace building structure ground | 50 | 1.10 M.L.F. | \$5,925.29 | \$7,184.21 | 1.1000 | 1 | 1 | \$7,184.21 | \$7,184.21 |
| Maintenance and repair of general wiring lightning protection system | 1 | 1.10 M.L.F. | \$120.45 | \$148.38 | 55.0000 | 55 | 55 | \$8,160.65 | \$8,160.65 |
| Overhaul water heater, gas / oil, 70 gallon | 5 | 2.00 Ea. | \$345.73 | \$432.80 | 11.0000 | 11 | 11 | \$4,760.75 | \$4,760.75 |
| Inspect and clean spray heads, emergency eye wash | 3 | 2.00 Ea. | \$103.07 | \$129.03 | 18.3333 | 18 | 18 | \$2,322.49 | \$2,322.49 |
| Replace washer in spud connection lavatory, vitreous china | 7 | 6.00 Ea. | \$103.93 | \$126.84 | 7.8571 | 7 | 7 | \$887.91 | \$887.91 |
| Replace faucets sink, laboratory | 10 | 2.00 Ea. | \$390.94 | \$470.24 | 5.5000 | 5 | 5 | \$2,351.21 | \$2,351.21 |
| Replace sink and fittings, polyethylene lab. | 15 | 2.00 Ea. | \$4,785.95 | \$5,579.88 | 3.6667 | 3 | 3 | \$16,739.63 | \$16,739.63 |
| Correct water pressure drinking fountain | 2 | 2.00 Ea. | \$88.02 | \$110.19 | 27.5000 | 27 | 27 | \$2,975.07 | \$2,975.07 |

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| Replace refrigerant drinking fountain | 2 | 2.00 Ea. | \$70.81 | \$82.86 | 27.5000 | 27 | 27 | \$2,237.20 | \$2,237.20 | |
| Repair drain leak drinking fountain | 4 | 2.00 Ea. | \$58.19 | \$70.38 | 13.7500 | 13 | 13 | \$914.92 | \$914.92 | |
| Inspect and clean shower head emergency shower station | 3 | 2.00 Ea. | \$103.07 | \$129.03 | 18.3333 | 18 | 18 | \$2,322.49 | \$2,322.49 | |
| Replace shower emergency shower station | 25 | 2.00 Ea. | \$2,106.16 | \$2,518.30 | 2.2000 | 2 | 2 | \$5,036.60 | \$5,036.60 | |
| Unplug line urinal | 5 | 4.00 Ea. | \$610.57 | \$764.33 | 11.0000 | 11 | 11 | \$8,407.59 | \$8,407.59 | |
| Replace washer in faucet lavatory, vitreous china | 2 | 6.00 Ea. | \$81.40 | \$101.50 | 27.5000 | 27 | 27 | \$2,740.59 | \$2,740.59 | |
| Replace eye wash station, emergency eye wash | 25 | 2.00 Ea. | \$1,571.83 | \$1,911.10 | 2.2000 | 2 | 2 | \$3,822.20 | \$3,822.20 | |
| Replace water heater, gas / oil, 70 gallon | 12 | 2.00 Ea. | \$6,428.64 | \$7,475.57 | 4.5833 | 4 | 4 | \$29,902.26 | \$29,902.26 | |
| Replace pipe, 4" pipe and fittings, PVC | 30 | 26.00 L.F. | \$2,156.51 | \$2,661.81 | 1.8333 | 1 | 1 | \$2,661.81 | \$2,661.81 | |
| Replace drain: roof, scupper, area | 40 | 4.00 Ea. | \$4,521.49 | \$5,215.40 | 1.3750 | 1 | 1 | \$5,215.40 | \$5,215.40 | |
| Replace faucets lavatory, vitreous china | 10 | 6.00 Ea. | \$1,172.83 | \$1,410.73 | 5.5000 | 5 | 5 | \$7,053.64 | \$7,053.64 | |
| Clean out strainer and P trap lavatory, vitreous china | 2 | 6.00 Ea. | \$220.91 | \$276.54 | 27.5000 | 27 | 27 | \$7,466.69 | \$7,466.69 | |
| Replace faucet washer sink, iron enamel | 2 | 2.00 Ea. | \$26.90 | \$33.54 | 27.5000 | 27 | 27 | \$905.55 | \$905.55 | |
| Clean trap sink, iron enamel | 3 | 2.00 Ea. | \$18.01 | \$22.55 | 18.3333 | 18 | 18 | \$405.87 | \$405.87 | |
| Replace faucets sink, iron enamel | 10 | 2.00 Ea. | \$390.94 | \$470.24 | 5.5000 | 5 | 5 | \$2,351.21 | \$2,351.21 | |
| Unstop sink, iron enamel | 2 | 2.00 Ea. | \$88.02 | \$110.19 | 27.5000 | 27 | 27 | \$2,975.07 | \$2,975.07 | |
| Replace sink, P.E.C.I. sink, iron enamel kitchen | 35 | 2.00 Ea. | \$2,416.86 | \$2,818.55 | 1.5714 | 1 | 1 | \$2,818.55 | \$2,818.55 | |
| Replace faucet washer sink, laboratory | 2 | 2.00 Ea. | \$26.90 | \$33.54 | 27.5000 | 27 | 27 | \$905.55 | \$905.55 | |
| | | | \$1,256,384.53 | \$1,476,409.95 | | | | MR Subtotal | \$4,340,689.12 | |
| | | | | | | | | | MR Per Year | \$78,800.07 |
| | | | | | | | | | PM Total | \$23,612.68 |
| | | | | | | | | | Subtotal | \$102,412.75 |
| | | | | | | | | | Total Per Unit | \$7.38 |

FAC 3171 ELECTRONIC AND COMMUNICATION RDTE FACILITY

Release 2023 Qtr 4

Zip Code Prefix 222

Type PM

UM SF

Design Life 55

Average Size 13881.120242

SUC \$7.38

| Description | Qty | Labor Hours | Bare Mat | Bare Labor | Bare Equip | Bare Total | Total In-House | Total Incl OP |
|--|------|-------------|----------|------------|------------|-------------|----------------|---------------|
| Door, emergency egress, swinging, annualized | 4.00 | 1.04 | \$67.05 | \$45.93 | \$0.00 | \$112.99 | \$133.47 | \$157.31 |
| Door, overhead, electric, roll up, to 24' high x 25' wide, annualized | 1.00 | 4.07 | \$43.08 | \$179.97 | \$0.00 | \$223.04 | \$281.34 | \$341.79 |
| Urinals, annualized | 4.00 | 0.91 | \$26.51 | \$48.66 | \$0.00 | \$75.17 | \$92.42 | \$111.00 |
| Toilet (vacuum breaker type), annualized | 6.00 | 1.06 | \$53.13 | \$56.77 | \$0.00 | \$109.90 | \$132.24 | \$157.24 |
| Lavatories, annualized | 6.00 | 2.09 | \$46.75 | \$130.80 | \$0.00 | \$177.55 | \$221.47 | \$267.72 |
| Drink fountain, annualized | 2.00 | 1.24 | \$74.89 | \$66.27 | \$0.00 | \$141.16 | \$168.53 | \$199.65 |
| Water heater, gas, to 120 gal., annualized | 2.00 | 3.44 | \$204.42 | \$183.12 | \$0.00 | \$387.54 | \$462.92 | \$548.52 |
| Boiler, hot water, oil, gas, or comb. fired, 500 -1000 MBH, annualized | 1.00 | 17.38 | \$88.55 | \$1,090.00 | \$0.00 | \$1,178.55 | \$1,514.40 | \$1,854.69 |
| Fan coil unit, annualized | 4.00 | 13.35 | \$327.89 | \$715.04 | \$0.00 | \$1,042.93 | \$1,290.23 | \$1,553.92 |
| Air filter, electrostatic, annualized | 4.00 | 30.41 | \$44.33 | \$1,621.92 | \$0.00 | \$1,666.25 | \$2,157.25 | \$2,650.48 |
| Fire dampers, annualized | 4.00 | 4.63 | \$36.03 | \$292.99 | \$0.00 | \$329.02 | \$420.52 | \$513.82 |
| Fan, axial, up to 5,000 CFM, annualized | 1.00 | 1.24 | \$8.30 | \$66.71 | \$0.00 | \$75.01 | \$95.85 | \$117.11 |
| Package unit, air cooled, 25 thru 50 ton, annualized | 1.00 | 3.25 | \$166.98 | \$204.92 | \$0.00 | \$371.90 | \$450.07 | \$536.60 |
| Package unit, computer room, annualized | 1.00 | 4.34 | \$136.62 | \$274.68 | \$0.00 | \$411.30 | \$507.37 | \$610.26 |
| Controls, central system, electro/pneumatic, annualized | 1.00 | 1.92 | \$169.00 | \$121.21 | \$0.00 | \$290.21 | \$343.47 | \$405.19 |
| Dehumidifier, desiccant wheel, annualized | 1.00 | 5.06 | \$71.85 | \$270.32 | \$0.00 | \$342.17 | \$430.45 | \$522.33 |
| Backflow prevention device, up to 4", annually | 4.00 | 1.33 | \$56.06 | \$83.71 | \$0.00 | \$139.78 | \$170.50 | \$204.02 |
| Extinguishing system, wet pipe, annualized | 1.00 | 11.34 | \$49.59 | \$710.68 | \$0.00 | \$760.27 | \$978.43 | \$1,199.07 |
| Transformer, dry type 500 KVA and over, annually | 1.00 | 0.77 | \$13.83 | \$53.61 | \$0.00 | \$67.44 | \$84.91 | \$103.07 |
| Panelboard, 225 A and above, annualized | 4.00 | 1.76 | \$88.00 | \$121.66 | \$0.00 | \$209.66 | \$254.96 | \$304.66 |
| Security, intrusion alarm system, annualized | 1.00 | 3.83 | \$149.07 | \$241.25 | \$0.00 | \$390.32 | \$477.61 | \$572.34 |
| Emergency diesel or gas generator, over 15 KVA, annualized | 1.00 | 16.15 | \$83.06 | \$1,020.69 | \$0.00 | \$1,103.75 | \$1,418.27 | \$1,736.94 |
| Power stablizer, annually | 1.00 | 0.62 | \$9.16 | \$39.69 | \$0.00 | \$48.85 | \$61.68 | \$74.96 |
| Uninterrupted power system, up to 200 KVA, annually | 1.00 | 3.01 | \$169.72 | \$190.73 | \$0.00 | \$360.46 | \$434.65 | \$517.33 |
| Uninterrupted power system, up to 200 KVA, annualized | 2.00 | 45.85 | \$434.63 | \$2,886.80 | \$0.00 | \$3,321.43 | \$4,230.94 | \$5,162.17 |
| Light, emergency, hardwired system, annualized | 8.00 | 2.00 | \$71.84 | \$126.19 | \$0.00 | \$198.03 | \$243.08 | \$291.71 |
| Crane, electric bridge, up to 5 ton, annualized | 1.00 | 2.92 | \$206.82 | \$107.79 | \$0.00 | \$314.61 | \$367.63 | \$430.99 |
| Hoist, pneumatic, annualized | 1.00 | 1.31 | \$187.40 | \$48.59 | \$0.00 | \$236.00 | \$269.31 | \$312.00 |
| Refrigerator freezer, walk-in box w/external condenser, annualized | 1.00 | 1.47 | \$383.55 | \$53.01 | \$0.00 | \$436.56 | \$490.81 | \$564.25 |
| Extinguishing system, FM200, annualized | 1.00 | 9.26 | \$642.62 | \$492.68 | \$0.00 | \$1,135.30 | \$1,347.37 | \$1,591.56 |
| | | | | | | \$15,657.15 | \$19,532.15 | \$23,612.68 |

FAC 3171 ELECTRONIC AND COMMUNICATION RDTE FACILITY

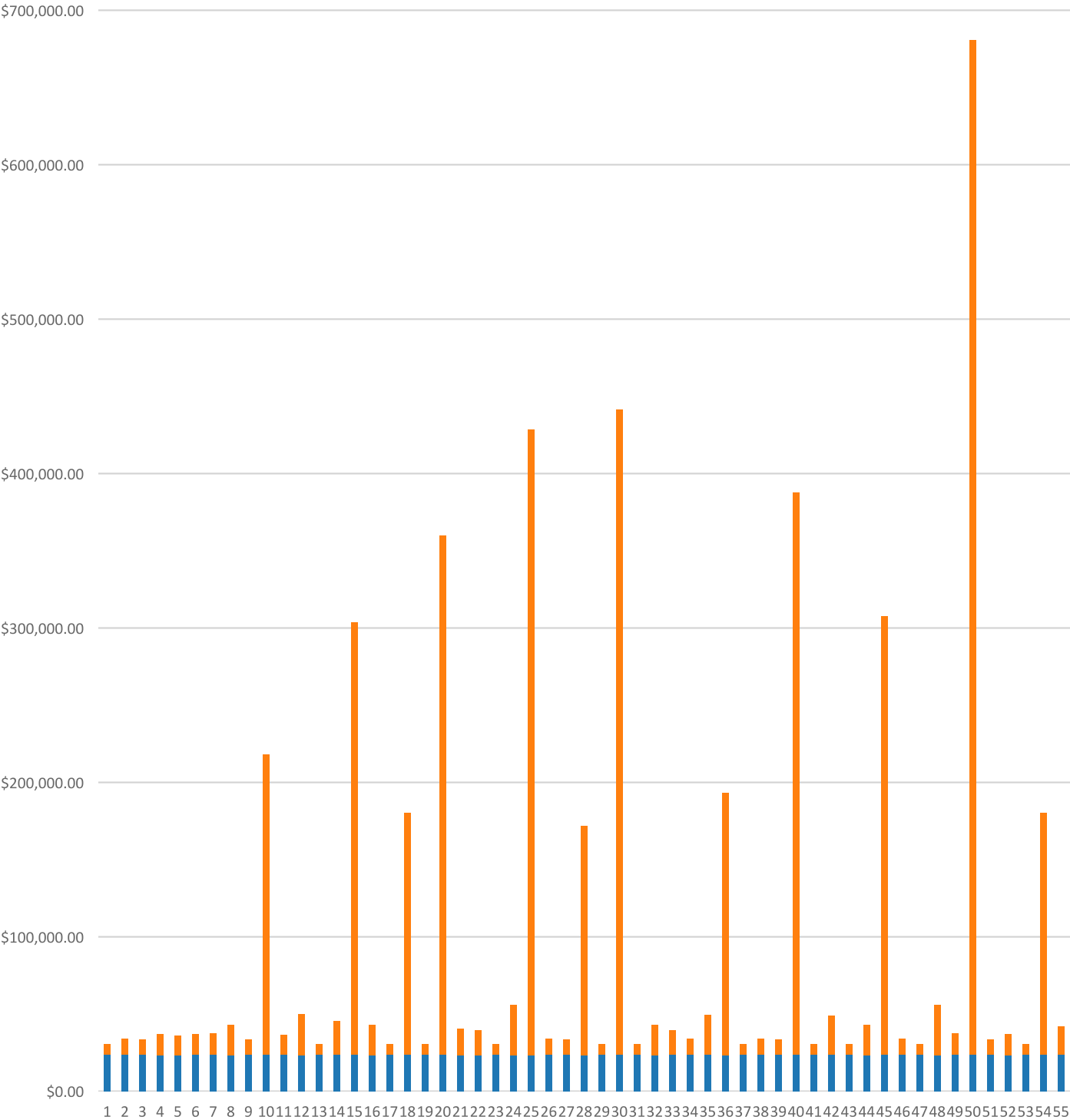
Modeled Component List CostWorks Release 2023 Qtr 4

| | |
|---|-------------|
| B20 Exterior Enclosure | |
| Aluminum Window, Fixed, 1st floor | 64.0 Ea. |
| Steel, Painted | 4.0 Ea. |
| Steel Single, Roll-Up | 1.0 Ea. |
| B30 Roofing | |
| Built-Up Roofing | 119.0 Sq. |
| Aluminum Gutter | 490.0 L.F. |
| C10 Interior Construction | |
| Steel Painted Interior Doors | 4.0 Ea. |
| Solid Core Interior Doors | 18.0 Ea. |
| Lockset, Brass | 28.0 Ea. |
| C30 Interior Finishes | |
| Concrete, Finished | 35.7 C.S.F. |
| Vinyl Sheet | 943.0 S.Y. |
| Rubber Tile | 132.0 S.Y. |
| Carpet | 89.0 S.Y. |
| Acoustic Tile, fire-rated | 79.3 C.S.F. |
| D20 Plumbing | |
| Circulation Pump, 1/12 HP | 2.0 Ea. |
| Emergency Shower Station | 2.0 Ea. |
| Emergency Eye Wash | 2.0 Ea. |
| Water Heater, Gas / Oil, 70 Gallon | 2.0 Ea. |
| Drain: Roof, Scupper, Area | 4.0 Ea. |
| Sink, Iron Enamel | 2.0 Ea. |
| D30 HVAC | |
| Boiler, Gas, 2000 MBH | 1.0 Ea. |
| Fan Coil, 30 ton | 4.0 Ea. |
| Draft Fan, 6700 CFM | 1.0 Ea. |
| Exhaust Fan, propeller exh., 4700 CFM | 1.0 Ea. |
| Explosionproof Industrial Heater | 2.0 Ea. |
| Computer Room A/C Units, Chilled Water, 5 ton | 1.0 Ea. |
| Single Zone Air Conditioner, 60 ton | 1.0 Ea. |
| D40 Fire Protection | |
| Sprinkler System, Fire Supression, sprinkler head | 60.0 Ea. |
| Sprinkler System, Fire Supression , 3" backflow preventer | 1.0 Ea. |
| Extinguishing system, FM200 | 1.0 Each |
| D50 Electrical | |
| Rectifier, Up To 600 V | 2.0 Ea. |
| Load Center, 100 A, maintenance & inspection | 4.0 Ea. |
| Load Center, 100 A, replacement | 4.0 Ea. |
| Lightning Ground Rod | 4.0 Ea. |
| Computer Ground System | 0.8 M.L.F. |
| Generator, Diesel, 750 KW | 1.0 Ea. |
| Transfer Switch | 1.0 Ea. |
| Emergency Lighting Fixture | 8.0 Ea. |
| UPS Battery, maintenance & inspection | 1.0 Ea. |
| Smoke Detector | 16.0 Ea. |
| Manual Pull Station | 4.0 Ea. |
| Fire Alarm Control Panel | 1.0 Ea. |
| Fire Alarm Bell | 4.0 Ea. |
| Building Structure Ground | 1.1 M.L.F. |
| UPS, up to 200 KVA, annualized | 2.0 Each |

E10 Equipment

| | |
|---|----------|
| Crane, Electric, up to 5 ton, annualized | 1.0 Each |
| Hoist, pneumatic, annualized | 1.0 Each |
| Refrigerator freezer, walk-in, annualized | 1.0 Each |

FAC 3171 ELECTRONIC AND COMMUNICATION RDTE FACILITY
Sustainment by Year
CostWorks Release 2023 Qtr 4



PM Cost
MR Cost