

FAC 3171 Electronic and Communication RDT&E Facility

RUC: \$240.43 SF

Source: USACE PAX Newsletter 3.2.2 of
Average of CatCodes 17135 and 31010
Deflated to FY-09 using Appendix C
In V12, Tri-Service and USACE PAX Newsletter values were updated while all
other values were inflated only.

SUC: \$2.35 SF

Source: Cost Works model in \$FY-08, inflated to \$FY-09 using Green Book Table 5-6
(O&M less DHP)
In V12, values were inflated only.

Model follows:

Chart: A chart showing relative annual sustainment requirements follows:

FAC 3171 Electronic and Communication RDT&E Facility
CostWorks 2008 Quarter 2 -

Design Life= 55
Average S.F= 10469

Terminal Cutoff is the removal of a single task occurrence if that task occurs within 10% of the end of the design life and if the frequency of the task exceeds 20% of the design life. This prevents scheduling major work near the end of the design life

Description	Frequency	Crew	Qty	Unit	Total Incl. O&P	Zip Code Prefix	Type	Release	Adjusted Occurrences	lifecost	Terminal Cutoff
Repair brick wall - 1st floor	25	1 Bric	200.000	S.F.	8,992.00	200	FMR	2008 Qtr 2	1	17984	\$ 8,992.00
Replace glass - 1st floor (1% of glass)	1	1 Carp	18.100	S.F.	192.22	200	FMR	2008 Qtr 2	55	10572.21	\$ 10,572.21
Replace glass - 1st floor (1% of glass)	1	1 Carp	3.960	S.F.	42.06	200	FMR	2008 Qtr 2	55	2313.036	\$ 2,313.04
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	1 Carp	26.000	Ea.	3,541.20	200	FMR	2008 Qtr 2	2	7082.4	\$ 7,082.40
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	1 Carp	13.000	Ea.	6,668.87	200	FMR	2008 Qtr 2	0	6668.87	\$ -
Repair steel, painted, door	14	1 Carp	3.000	Ea.	2,059.08	200	FMR	2008 Qtr 2	3	6177.24	\$ 6,177.24
Refinish 3'-0" x 7'-0" steel, painted, door	4	1 Pord	3.000	Ea.	120.93	200	FMR	2008 Qtr 2	13	1572.09	\$ 1,572.09
Replace 3'-0" x 7'-0" steel, painted, door	45	1 Carp	3.000	Ea.	1,860.12	200	FMR	2008 Qtr 2	1	1860.12	\$ 1,860.12
Repair 12' x 12' steel roll-up door	10	1 Carp	2.000	Ea.	1,929.08	200	FMR	2008 Qtr 2	5	9645.4	\$ 9,645.40
Refinish 12' x 12' steel roll-up door	5	1 Pord	2.000	Ea.	411.08	200	FMR	2008 Qtr 2	11	4521.88	\$ 4,521.88
Replace 12' x 12' steel roll-up door	35	2 Carp	2.000	Ea.	7,699.10	200	FMR	2008 Qtr 2	1	7699.1	\$ 7,699.10
Debris removal and visual inspection built-up roofing	0.5	2 Rofc	10.500	M.S.F.	371.18	200	FMR	2008 Qtr 2	110	40829.25	\$ 40,829.25
Non-destructive moisture inspection built-up roofing	5	2 Rofc	10.500	M.S.F.	1,152.90	200	FMR	2008 Qtr 2	11	12681.9	\$ 12,681.90
Minor membrane repairs - (2% of roof area) built-up roofing	1	G5	2.000	Sq.	814.08	200	FMR	2008 Qtr 2	55	44774.4	\$ 44,774.40
Flashing repairs - (2 S.F. per sq. repaired) built-up roofing	1	2 Rofc	4.000	S.F.	16.00	200	FMR	2008 Qtr 2	55	880	\$ 880.00
Minor membrane replacement - (25% of roof area) built-up roofing	15	G5	26.200	Sq.	18,577.90	200	FMR	2008 Qtr 2	3	55733.69	\$ 55,733.69
Total roof replacement built-up roofing	28	G1	104.700	Sq.	70,771.97	200	FMR	2008 Qtr 2	1	70771.97	\$ 70,771.97
Repair 8" concrete block wall - (2% of walls) painted	25	1 Bric	1.200	C.S.F.	1,456.82	200	FMR	2008 Qtr 2	1	2913.648	\$ 1,456.82
Refinish concrete block wall painted	4	1 Pord	57.500	C.S.F.	6,792.48	200	FMR	2008 Qtr 2	13	88302.18	\$ 88,302.18
Replace 8" concrete block wall painted	75	2 Bric	57.500	C.S.F.	74,530.93	200	FMR	2008 Qtr 2	0	0	\$ -
Repair steel painted interior door	14	1 Carp	3.000	Ea.	594.42	200	FMR	2008 Qtr 2	3	1783.26	\$ 1,783.26
Refinish 3'-0" x 7'-0" steel painted interior door	4	1 Pord	3.000	Ea.	182.46	200	FMR	2008 Qtr 2	13	2371.98	\$ 2,371.98
Replace 3'-0" x 7'-0" steel painted interior door	60	1 Carp	3.000	Ea.	3,269.88	200	FMR	2008 Qtr 2	0	0	\$ -
Repair solid core wood door interior	11	1 Carp	5.000	Ea.	990.70	200	FMR	2008 Qtr 2	5	4953.5	\$ 4,953.50
Refinish 3'-0" x 7'-0" solid core wood door interior	4	1 Pord	5.000	Ea.	259.90	200	FMR	2008 Qtr 2	13	3378.7	\$ 3,378.70
Replace 3'-0" x 7'-0" solid core wood door interior	40	1 Carp	5.000	Ea.	2,125.60	200	FMR	2008 Qtr 2	1	2125.6	\$ 2,125.60
Repair 5/8" drywall - (2% of walls)	20	1 Carp	29.800	S.F.	56.92	200	FMR	2008 Qtr 2	2	113.836	\$ 113.84
Replace 5/8" drywall	75	2 Carp	1,490.000	S.F.	4,008.10	200	FMR	2008 Qtr 2	0	0	\$ -
Refinish concrete floor finished	25	2 Cefi	81.900	C.S.F.	34,454.51	200	FMR	2008 Qtr 2	1	68909.02	\$ 34,454.51
Replace vinyl floor	18	1 Tilf	40.500	S.Y.	2,361.15	200	FMR	2008 Qtr 2	2	7083.45	\$ 4,722.30
Replace carpet	8	2 Tilf	92.600	S.Y.	4,828.16	200	FMR	2008 Qtr 2	6	28968.98	\$ 28,968.98
Acoustic tile repairs - (2% of ceilings)	9	1 Carp	0.200	C.S.F.	106.33	200	FMR	2008 Qtr 2	6	638.004	\$ 638.00
Replace acoustic tile ceiling, fire-rated	20	1 Carp	12.000	C.S.F.	5,748.00	200	FMR	2008 Qtr 2	2	11496	\$ 11,496.00
Replace flush valve diaphragm tankless water closet	10	1 Plum	8.000	Ea.	664.48	200	FMR	2008 Qtr 2	5	3322.4	\$ 3,322.40
Rebuild flush valve tankless water closet	20	1 Plum	8.000	Ea.	1,280.08	200	FMR	2008 Qtr 2	2	2560.16	\$ 2,560.16
Unplug clogged line tankless water closet	5	1 Plum	8.000	Ea.	1,681.44	200	FMR	2008 Qtr 2	11	18495.84	\$ 18,495.84
Replace tankless water closet	35	2 Plum	8.000	Ea.	5,186.88	200	FMR	2008 Qtr 2	1	5186.88	\$ 5,186.88
Replace tankless flush valve	25	1 Plum	8.000	Ea.	1,962.96	200	FMR	2008 Qtr 2	1	3925.92	\$ 1,962.96
Replace wax ring gasket tankless water closet	5	1 Plum	8.000	Ea.	1,097.60	200	FMR	2008 Qtr 2	11	12073.6	\$ 12,073.60
Replace flush valve diaphragm urinal	7	1 Plum	3.000	Ea.	249.18	200	FMR	2008 Qtr 2	7	1744.26	\$ 1,744.26
Rebuild flush valve urinal	20	1 Plum	3.000	Ea.	480.03	200	FMR	2008 Qtr 2	2	960.06	\$ 960.06
Unplug line urinal	5	1 Plum	3.000	Ea.	419.73	200	FMR	2008 Qtr 2	11	4617.03	\$ 4,617.03
Replace wall-hung urinal	35	2 Plum	3.000	Ea.	3,019.71	200	FMR	2008 Qtr 2	1	3019.71	\$ 3,019.71
Replace washer in spud connection lavatory, vitreous china	7	1 Plum	14.000	Ea.	396.62	200	FMR	2008 Qtr 2	7	2776.34	\$ 2,776.34
Replace washer in faucet lavatory, vitreous china	2	1 Plum	14.000	Ea.	172.06	200	FMR	2008 Qtr 2	27	4645.62	\$ 4,645.62

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Description	Frequency	Crew	Qty	Unit	Total Incl. O&P	Zip Code Prefix	Type	Release	Adjusted Occurrences	lifecost	Terminal Cutoff
Replace faucets lavatory, vitreous china	10	1 Plum	14.000	Ea.	2,086.84	200	FMR	2008 Qtr 2	5	10434.2	\$ 10,434.20
Clean out strainer and P trap lavatory, vitreous china	2	1 Plum	14.000	Ea.	469.98	200	FMR	2008 Qtr 2	27	12689.46	\$ 12,689.46
Replace lavatory, vitreous china	35	2 Plum	14.000	Ea.	8,899.80	200	FMR	2008 Qtr 2	1	8899.8	\$ 8,899.80
Replace faucet washer sink, iron enamel	2	1 Plum	1.000	Ea.	12.19	200	FMR	2008 Qtr 2	27	329.13	\$ 329.13
Clean trap sink, iron enamel	3	1 Plum	1.000	Ea.	8.25	200	FMR	2008 Qtr 2	18	148.5	\$ 148.50
Replace faucets sink, iron enamel	10	1 Plum	1.000	Ea.	149.06	200	FMR	2008 Qtr 2	5	745.3	\$ 745.30
Unstop sink sink, iron enamel	2	1 Plum	1.000	Ea.	40.50	200	FMR	2008 Qtr 2	27	1093.5	\$ 1,093.50
Replace sink, P.E.C.I. sink, iron enamel	35	2 Plum	1.000	Ea.	657.69	200	FMR	2008 Qtr 2	1	657.69	\$ 657.69
Check / minor repairs drinking fountain	1	1 Plum	3.000	Ea.	142.02	200	FMR	2008 Qtr 2	55	7811.1	\$ 7,811.10
Repair internal leaks drinking fountain	4	1 Plum	3.000	Ea.	130.29	200	FMR	2008 Qtr 2	13	1693.77	\$ 1,693.77
Correct water pressure drinking fountain	2	1 Plum	3.000	Ea.	121.50	200	FMR	2008 Qtr 2	27	3280.5	\$ 3,280.50
Replace refrigerant drinking fountain	2	1 Plum	3.000	Ea.	56.58	200	FMR	2008 Qtr 2	27	1527.66	\$ 1,527.66
Repair drain leak drinking fountain	4	1 Plum	3.000	Ea.	81.09	200	FMR	2008 Qtr 2	13	1054.17	\$ 1,054.17
Replace fountain drinking fountain	10	2 Plum	3.000	Ea.	3,580.71	200	FMR	2008 Qtr 2	5	17903.55	\$ 17,903.55
Inspect and clean shower head emergency shower station	3	1 Plum	1.000	Ea.	47.44	200	FMR	2008 Qtr 2	18	853.92	\$ 853.92
Replace shower emergency shower station	25	2 Plum	1.000	Ea.	873.58	200	FMR	2008 Qtr 2	1	1747.16	\$ 873.58
Inspect and clean spray heads, emergency eye wash	3	1 Plum	1.000	Ea.	47.44	200	FMR	2008 Qtr 2	18	853.92	\$ 853.92
Replace eye wash station, emergency eye wash	25	2 Plum	1.000	Ea.	695.88	200	FMR	2008 Qtr 2	1	1391.76	\$ 695.88
Replace pipe and fittings, copper 3/4"	20	2 Plum	16.000	L.F.	343.68	200	FMR	2008 Qtr 2	2	687.36	\$ 687.36
Replace pipe and fittings, copper 2"	25	2 Plum	16.000	L.F.	785.76	200	FMR	2008 Qtr 2	1	1571.52	\$ 785.76
Drain and flush water heater, electric, 120 gallon	7	1 Plum	1.000	Ea.	283.04	200	FMR	2008 Qtr 2	7	1981.28	\$ 1,981.28
Check operation water heater, electric, 120 gallon	3	1 Plum	1.000	Ea.	2.48	200	FMR	2008 Qtr 2	18	44.64	\$ 44.64
Replace water heater, electric, 120 gallon	15	2 Plum	1.000	Ea.	10,543.79	200	FMR	2008 Qtr 2	3	31631.37	\$ 31,631.37
Unclog floor drain, PVC	20	1 Plum	1.000	Ea.	45.87	200	FMR	2008 Qtr 2	2	91.74	\$ 91.74
Repair joint pipe and fittings, PVC	10	1 Plum	2.000	Ea.	288.28	200	FMR	2008 Qtr 2	5	1441.4	\$ 1,441.40
Replace pipe, 4" pipe and fittings, PVC	30	2 Plum	300.000	L.F.	21,957.00	200	FMR	2008 Qtr 2	1	21957	\$ 21,957.00
General maintenance & repair drain: roof, scupper, area	1	1 Plum	3.000	Ea.	107.01	200	FMR	2008 Qtr 2	55	5885.55	\$ 5,885.55
Replace drain: roof, scupper, area	40	1 Plum	3.000	Ea.	1,404.42	200	FMR	2008 Qtr 2	1	1404.42	\$ 1,404.42
Repair boiler, gas, 2000 MBH	7	Q5	1.000	Ea.	4,504.76	200	FMR	2008 Qtr 2	7	31533.32	\$ 31,533.32
Replace boiler, gas, 2000 MBH	30	Q7	1.000	Ea.	32,374.20	200	FMR	2008 Qtr 2	1	32374.2	\$ 32,374.20
Replace metal flue, all fuel SS, 6" diameter metal flue / chimney	15	Q9	1.000	L.F.	105.67	200	FMR	2008 Qtr 2	3	317.01	\$ 317.01
Replace roof mounted exhaust fan, 2000 CFM exhaust fan	20	Q20	1.000	Ea.	1,360.26	200	FMR	2008 Qtr 2	2	2720.52	\$ 2,720.52
Repair circulator pump, 1/12 - 3/4 H.P.	5	1 Stpi	1.000	Ea.	84.25	200	FMR	2008 Qtr 2	11	926.75	\$ 926.75
Replace circulator pump, 1/12 - 3/4 H.P.	15	Q1	1.000	Ea.	2,870.47	200	FMR	2008 Qtr 2	3	8611.41	\$ 8,611.41
Repair damaged pipe insulation, fiberglass 3/4"	5	Q14	2.000	Ea.	38.36	200	FMR	2008 Qtr 2	11	421.96	\$ 421.96
Repair damaged pipe insulation, fiberglass 2"	5	Q14	2.000	Ea.	45.06	200	FMR	2008 Qtr 2	11	495.66	\$ 495.66
Replace pipe insulation, fiberglass 3/4"	5	Q14	0.010	M.L.F.	76.61	200	FMR	2008 Qtr 2	11	842.743	\$ 842.74
Replace pipe insulation, fiberglass 2"	5	Q14	0.010	M.L.F.	90.69	200	FMR	2008 Qtr 2	11	997.601	\$ 997.60
Repair single zone rooftop unit, 25 ton	10	Q6	0.500	Ea.	14,961.45	200	FMR	2008 Qtr 2	5	74807.23	\$ 74,807.23
Replace single zone rooftop unit, 25 ton	15	Q7	1.000	Ea.	39,677.60	200	FMR	2008 Qtr 2	3	119032.8	\$ 119,032.80
Inspect sprinkler system	1	1 Plum	1.000	Ea.	32.89	200	FMR	2008 Qtr 2	55	1808.95	\$ 1,808.95
Replace sprinkler head	20	1 Plum	55.000	Ea.	4,315.30	200	FMR	2008 Qtr 2	2	8630.6	\$ 8,630.60
Maintenance and inspection lighting panel, indoor	3	1 Elec	1.000	Ea.	35.63	200	FMR	2008 Qtr 2	18	641.34	\$ 641.34
Maintenance and repair breaker, 1 pole circuit breaker	20	1 Elec	40.000	Ea.	2,545.20	200	FMR	2008 Qtr 2	2	5090.4	\$ 5,090.40
Repair failed breaker, 3 pole circuit breaker	4	1 Elec	1.000	Ea.	607.28	200	FMR	2008 Qtr 2	13	7894.64	\$ 7,894.64

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Description	Frequency	Crew	Qty	Unit	Total Incl. O&P	Zip Code Prefix	Type	Release	Adjusted Occurrence s	lifecost	Terminal Cutoff
Maintenance and inspection C.B., 3 pole circuit breaker	0.33	1 Elec	1.000	Ea.	28.50	200	FMR	2008 Qtr 2	166	4731	\$ 4,731.00
Replace C.B. enclosed, 600 V, 3 pole circuit breaker	12	1 Elec	1.000	Ea.	1,158.09	200	FMR	2008 Qtr 2	4	4632.36	\$ 4,632.36
Maintenance and repair receptacles and plugs	20	1 Elec	110.000	Ea.	4,260.30	200	FMR	2008 Qtr 2	2	8520.6	\$ 8,520.60
Replace receptacle/plug receptacles and plugs	20	1 Elec	25.000	Ea.	1,610.50	200	FMR	2008 Qtr 2	2	3221	\$ 3,221.00
Maintenance and repair wiring devices, switches	10	1 Elec	27.000	Ea.	1,045.71	200	FMR	2008 Qtr 2	5	5228.55	\$ 5,228.55
Replace switch wiring devices, switches	15	1 Elec	27.000	Ea.	1,683.45	200	FMR	2008 Qtr 2	3	5050.35	\$ 5,050.35
Replace fluor. ballast for fluorescent lighting fixture, 80 W	10	1 Elec	100.000	Ea.	12,008.00	200	FMR	2008 Qtr 2	5	60040	\$ 60,040.00
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	100.000	Ea.	3,118.00	200	FMR	2008 Qtr 2	5	15590	\$ 15,590.00
Replace fixture fluorescent lighting fixture, 80 W	20	1 Elec	25.000	Ea.	5,377.75	200	FMR	2008 Qtr 2	2	10755.5	\$ 10,755.50
Repair smoke detector	10	1 Elec	33.000	Ea.	1,551.00	200	FMR	2008 Qtr 2	5	7755	\$ 7,755.00
Check operation smoke detector	1	1 Elec	33.000	Ea.	471.90	200	FMR	2008 Qtr 2	55	25954.5	\$ 25,954.50
Replace smoke detector	15	1 Elec	33.000	Ea.	7,490.67	200	FMR	2008 Qtr 2	3	22472.01	\$ 22,472.01
Check and repair manual pull station	10	1 Elec	2.000	Ea.	169.74	200	FMR	2008 Qtr 2	5	848.7	\$ 848.70
Replace manual pull station	15	1 Elec	2.000	Ea.	303.78	200	FMR	2008 Qtr 2	3	911.34	\$ 911.34
Replace fire alarm bell, 6"	20	1 Elec	2.000	Ea.	343.02	200	FMR	2008 Qtr 2	2	686.04	\$ 686.04
Replace lamp emergency lighting fixture	2	1 Elec	4.000	Ea.	256.56	200	FMR	2008 Qtr 2	27	6927.12	\$ 6,927.12
Replace emergency lighting fixture	20	1 Elec	4.000	Ea.	3,886.40	200	FMR	2008 Qtr 2	2	7772.8	\$ 7,772.80
Maintenance and repair exit light	20	1 Elec	4.000	Ea.	159.48	200	FMR	2008 Qtr 2	2	318.96	\$ 318.96
Replace lamp exit light	5	1 Elec	4.000	Ea.	58.48	200	FMR	2008 Qtr 2	11	643.28	\$ 643.28
Replace lighting fixture exit light	20	1 Elec	4.000	Ea.	604.96	200	FMR	2008 Qtr 2	2	1209.92	\$ 1,209.92
Maintenance and inspection battery, dry	0.5	1 Elec	4.000	Ea.	142.52	200	FMR	2008 Qtr 2	110	15677.2	\$ 15,677.20
Replace battery, dry	5	1 Elec	8.000	Ea.	1,665.92	200	FMR	2008 Qtr 2	11	18325.12	\$ 18,325.12

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MR Subtotal	\$ 1,194,111.84
MR Per Year	\$ 21,711.12
PM Per Year	\$ 3,763.02
Subtotal	\$ 25,474.14
Total Per Unit	\$ 2.43

**FAC 3171 Electronic and Communication RDT&E Facility
CostWorks 2008 Quarter 2**

Qty	Assembly Number	Description	Total Incl. O&P	Zip Code Prefix	Type	Release
6.000	D3045 160 1950	VAV Boxes, annualized	456.00	200	FMR	2008 Qtr 2
1.000	B2035 400 1950	Door, overhead, manual, up to 24' high x 25' wide,	162.55	200	FMR	2008 Qtr 2
3.000	B2035 225 1950	Door, emergency egress, swinging, annualized	172.53	200	FMR	2008 Qtr 2
8.000	C1025 110 1950	Fire doors, swinging, annualized	238.88	200	FMR	2008 Qtr 2
14.000	D2015 100 4950	Lavatories, annualized	421.12	200	FMR	2008 Qtr 2
8.000	D2015 100 2950	Toilet (vacuum breaker type), annualized	129.20	200	FMR	2008 Qtr 2
3.000	D2015 100 1950	Urinals, annualized	48.45	200	FMR	2008 Qtr 2
3.000	D2015 800 1950	Drink fountain, annualized	178.08	200	FMR	2008 Qtr 2
1.000	D5015 230 1950	Switch, selector, high voltage, air, annualized	47.09	200	FMR	2008 Qtr 2
1.000	D5015 260 1950	Panelboard, 225 A and above, annualized	67.71	200	FMR	2008 Qtr 2
8.000	D5095 250 2950	Light, emergency, dry cell, annualized	641.44	200	FMR	2008 Qtr 2
1.000	D3025 130 2950	Boiler, hot water, oil, gas, or comb. fired, 120 - 500	1,199.97	200	FMR	2008 Qtr 2
			\$3,763.02			

FAC 3171 Sustainment by Year - Terminal Cutoff Applied

