

FAC 1732 Training Aids Support Building

RUC: \$155.74 SF

Source: USACE PAX Newsletter 3.2.2 dated 20 Mar 09
CatCode 14129
Deflated to FY-09 using Appendix C of newsletter
In V12, Tri-Service and USACE PAX Newsletter values were updated while all other values were inflated only.

SUC: \$2.10 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 1732 Training Aids Support Building
CostWorks 2008 Quarter 2

	Design Life= 40 Average S.F= 5,458	C.S.F.=100 S.F; MSF=1000 S.F Sq=100 S.F; M.L.F=1000 L.F	This spreadsheet was exported from R.S. Means CostWorks		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 In-House	Total Incl. O&P	Release	Occurrences In Design Life	Adjusted Occurrences	Terminal Cutoff
Replace 8" concrete block wall - 2nd floor	60	2 Bric	1,643.000	C.S.F.	1,899,308.00	2,296,914.00	2008 Qtr 2	0	0	\$ -
Point & refinish block wall - 1st floor	25	1 Bric	39.400	C.S.F.	16,922.30	20,783.50	2008 Qtr 2	1	1	\$ 20,783.50
Replace glass - 1st floor (1% of glass)	1	1 Carp	0.600	S.F.	5.50	6.48	2008 Qtr 2	40	40	\$ 259.20
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	1 Carp	10.000	Ea.	1,208.50	1,438.00	2008 Qtr 2	2	1	\$ 1,438.00
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	1 Carp	10.000	Ea.	4,515.00	5,300.00	2008 Qtr 2	0	0	\$ -
Repair 3'-9" x 5'-5" steel frame window - 1st flr.	20	1 Carp	12.000	Ea.	3,148.20	3,693.60	2008 Qtr 2	2	1	\$ 3,693.60
Refinish 3'-9" x 5'-5" st. frame window - 1st flr.	5	1 Pord	12.000	Ea.	931.80	1,150.80	2008 Qtr 2	8	8	\$ 9,206.40
Replace 3'-9" x 5'-5" st. frame window - 1st flr.	45	1 Carp	12.000	Ea.	17,634.00	20,346.00	2008 Qtr 2	0	0	\$ -
Finish new 3'-9" x 5'-5" st. fr. window - 1st flr.	45	1 Pord	12.000	Ea.	808.80	997.80	2008 Qtr 2	0	0	\$ -
Repair 12' x 12' steel roll-up door	10	1 Carp	1.000	Ea.	837.00	972.50	2008 Qtr 2	4	3	\$ 2,917.50
Refinish 12' x 12' steel roll-up door	5	1 Pord	1.000	Ea.	189.25	230.95	2008 Qtr 2	8	8	\$ 1,847.60
Replace 12' x 12' steel roll-up door	35	2 Carp	1.000	Ea.	3,342.00	3,880.00	2008 Qtr 2	1	1	\$ 3,880.00
Repair steel, painted, door	14	1 Carp	2.000	Ea.	1,195.24	1,415.14	2008 Qtr 2	2	2	\$ 2,830.28
Refinish 3'-0" x 7'-0" steel, painted, door	4	1 Pord	2.000	Ea.	75.00	92.00	2008 Qtr 2	10	10	\$ 920.00
Replace 3'-0" x 7'-0" steel, painted, door	45	1 Carp	2.000	Ea.	1,043.00	1,221.00	2008 Qtr 2	0	0	\$ -
Debris removal and visual inspection built-up roofing	0.5	2 Rofc	5.400	M.S.F.	187.70	226.21	2008 Qtr 2	80	80	\$ 18,096.48
Non-destructive moisture inspection built-up roofing	5	2 Rofc	5.400	M.S.F.	580.82	702.49	2008 Qtr 2	8	8	\$ 5,619.89
Minor membrane repairs - (2% of roof area) built-up roofing	1	G5	1.000	Sq.	382.60	453.35	2008 Qtr 2	40	40	\$ 18,134.00
Flashing repairs - (2 S.F. per sq. repaired) built-up roofing	1	2 Rofc	2.100	S.F.	7.92	9.45	2008 Qtr 2	40	40	\$ 378.00
Minor membrane replacement - (25% of roof area) built-up roofing	15	G5	1.100	Sq.	716.47	858.15	2008 Qtr 2	2	2	\$ 1,716.31
Place new membrane over existing built-up roofing	20	G5	54.500	Sq.	20,372.10	24,174.57	2008 Qtr 2	2	1	\$ 24,174.57
Total roof replacement built-up roofing	28	G1	54.500	Sq.	33,732.78	40,104.92	2008 Qtr 2	1	1	\$ 40,104.92
Repair steel painted interior door	14	1 Carp	2.000	Ea.	342.24	406.28	2008 Qtr 2	2	2	\$ 812.56
Refinish 3'-0" x 7'-0" steel painted interior door	4	1 Pord	2.000	Ea.	112.80	139.00	2008 Qtr 2	10	10	\$ 1,390.00
Replace 3'-0" x 7'-0" steel painted interior door	60	1 Carp	2.000	Ea.	1,834.10	2,141.00	2008 Qtr 2	0	0	\$ -
Repair solid core wood door interior	11	1 Carp	5.000	Ea.	855.60	1,015.70	2008 Qtr 2	3	3	\$ 3,047.10
Refinish 3'-0" x 7'-0" solid core wood door interior	4	1 Pord	5.000	Ea.	237.00	292.50	2008 Qtr 2	10	10	\$ 2,925.00
Replace 3'-0" x 7'-0" solid core wood door interior	40	1 Carp	5.000	Ea.	1,770.00	2,060.00	2008 Qtr 2	1	0	\$ -
Repair 8" concrete block wall - (2% of walls) painted	25	1 Bric	1.200	C.S.F.	1,309.20	1,578.00	2008 Qtr 2	1	1	\$ 1,578.00
Refinish concrete block wall painted	4	1 Pord	6.200	C.S.F.	663.40	809.10	2008 Qtr 2	10	10	\$ 8,091.00
Replace 8" concrete block wall painted	75	2 Bric	6.200	C.S.F.	7,241.60	8,742.00	2008 Qtr 2	0	0	\$ -
Repair 5/8" drywall - (2% of walls)	20	1 Carp	28.000	S.F.	49.00	59.08	2008 Qtr 2	2	1	\$ 59.08
Replace 5/8" drywall	75	2 Carp	1,404.000	S.F.	3,495.96	4,240.08	2008 Qtr 2	0	0	\$ -
Replace carpet	8	2 Tilf	51.200	S.Y.	2,215.94	2,569.22	2008 Qtr 2	5	5	\$ 12,846.08
Refinish concrete floor finished	25	2 Cefi	47.800	C.S.F.	18,403.00	22,227.00	2008 Qtr 2	1	1	\$ 22,227.00
Replace vinyl floor	18	1 Tilf	23.100	S.Y.	1,226.61	1,501.50	2008 Qtr 2	2	2	\$ 3,003.00
Acoustic tile repairs - (2% of ceilings)	9	1 Carp	0.100	C.S.F.	45.95	55.00	2008 Qtr 2	4	4	\$ 220.00
Replace acoustic tile ceiling, fire-rated	20	1 Carp	5.600	C.S.F.	2,335.20	2,788.80	2008 Qtr 2	2	1	\$ 2,788.80
Repair sheetrock ceiling - (2% of ceilings)	20	1 Carp	0.050	C.S.F.	19.63	24.00	2008 Qtr 2	2	1	\$ 24.00

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CostWorks 2008 Quarter 2

Design Life= 40
Average S.F= 5,458

C.S.F=100 S.F; MSF=1000 S.F
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was exported
from R.S. Means CostWorks

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 In-House	Total Incl. O&P	Release	Occurrences In Design Life	Adjusted Occurrences	Terminal Cutoff
Refinish sheetrock ceiling	20	1 Pord	2.800	C.S.F.	401.80	497.00	2008 Qtr 2	2	1 \$	497.00
Replace sheetrock ceiling	40	2 Carp	2.800	C.S.F.	1,128.40	1,380.40	2008 Qtr 2	1	0 \$	-
Check / minor repairs drinking fountain	1	1 Plum	1.000	Ea.	38.50	48.50	2008 Qtr 2	40	40 \$	1,940.00
Repair internal leaks drinking fountain	4	1 Plum	1.000	Ea.	36.00	44.50	2008 Qtr 2	10	10 \$	445.00
Correct water pressure drinking fountain	2	1 Plum	1.000	Ea.	33.00	41.50	2008 Qtr 2	20	20 \$	830.00
Replace refrigerant drinking fountain	2	1 Plum	1.000	Ea.	15.90	18.95	2008 Qtr 2	20	20 \$	379.00
Repair drain leak drinking fountain	4	1 Plum	1.000	Ea.	22.82	27.27	2008 Qtr 2	10	10 \$	272.70
Replace fountain drinking fountain	10	2 Plum	1.000	Ea.	1,006.00	1,195.00	2008 Qtr 2	4	3 \$	3,585.00
Inspect and clean spray heads, emergency eye wash	3	1 Plum	1.000	Ea.	38.73	48.61	2008 Qtr 2	13	13 \$	631.93
Replace eye wash station, emergency eye wash	25	2 Plum	1.000	Ea.	581.00	705.00	2008 Qtr 2	1	1 \$	705.00
Replace washer in spud connection lavatory, vitreous china	7	1 Plum	2.000	Ea.	48.02	56.70	2008 Qtr 2	5	5 \$	283.50
Replace washer in faucet lavatory, vitreous china	2	1 Plum	2.000	Ea.	20.16	25.16	2008 Qtr 2	20	20 \$	503.20
Replace faucets lavatory, vitreous china	10	1 Plum	2.000	Ea.	249.76	301.70	2008 Qtr 2	4	3 \$	905.10
Clean out strainer and P trap lavatory, vitreous china	2	1 Plum	2.000	Ea.	55.40	68.80	2008 Qtr 2	20	20 \$	1,376.00
Replace lavatory, vitreous china	35	2 Plum	2.000	Ea.	1,067.56	1,281.20	2008 Qtr 2	1	1 \$	1,281.20
Replace faucet washer sink, iron enamel	2	1 Plum	1.000	Ea.	10.02	12.47	2008 Qtr 2	20	20 \$	249.40
Clean trap sink, iron enamel	3	1 Plum	1.000	Ea.	6.76	8.45	2008 Qtr 2	13	13 \$	109.85
Replace faucets sink, iron enamel	10	1 Plum	1.000	Ea.	124.88	150.85	2008 Qtr 2	4	3 \$	452.55
Unstop sink sink, iron enamel	2	1 Plum	1.000	Ea.	33.00	41.50	2008 Qtr 2	20	20 \$	830.00
Replace sink, P.E.C.I. sink, iron enamel	35	2 Plum	1.000	Ea.	555.00	661.00	2008 Qtr 2	1	1 \$	661.00
Replace flush valve diaphragm tankless water closet	10	1 Plum	2.000	Ea.	140.72	165.38	2008 Qtr 2	4	3 \$	496.14
Rebuild flush valve tankless water closet	20	1 Plum	2.000	Ea.	266.58	323.48	2008 Qtr 2	2	1 \$	323.48
Unplug clogged line tankless water closet	5	1 Plum	2.000	Ea.	344.80	430.70	2008 Qtr 2	8	8 \$	3,445.60
Replace tankless water closet	35	2 Plum	2.000	Ea.	1,093.20	1,294.80	2008 Qtr 2	1	1 \$	1,294.80
Replace tankless flush valve	25	1 Plum	2.000	Ea.	417.58	489.48	2008 Qtr 2	1	1 \$	489.48
Replace wax ring gasket tankless water closet	5	1 Plum	2.000	Ea.	224.40	281.00	2008 Qtr 2	8	8 \$	2,248.00
Replace flush valve diaphragm urinal	7	1 Plum	2.000	Ea.	140.72	165.38	2008 Qtr 2	5	5 \$	826.90
Rebuild flush valve urinal	20	1 Plum	2.000	Ea.	266.58	323.48	2008 Qtr 2	2	1 \$	323.48
Unplug line urinal	5	1 Plum	2.000	Ea.	229.80	286.70	2008 Qtr 2	8	8 \$	2,293.60
Replace wall-hung urinal	35	2 Plum	2.000	Ea.	1,694.00	2,027.80	2008 Qtr 2	1	1 \$	2,027.80
Repair circulator pump, 1/12 - 3/4 H.P.	5	1 Stpi	1.000	Ea.	71.01	84.37	2008 Qtr 2	8	8 \$	674.96
Replace circulator pump, 1/12 - 3/4 H.P.	15	Q1	1.000	Ea.	2,461.00	2,845.00	2008 Qtr 2	2	2 \$	5,690.00
Repair damaged pipe insulation, fiberglass 3/4"	5	Q14	4.000	Ea.	64.08	78.20	2008 Qtr 2	8	8 \$	625.60
Repair damaged pipe insulation, fiberglass 2"	5	Q14	2.000	Ea.	37.60	45.90	2008 Qtr 2	8	8 \$	367.20
Replace pipe insulation, fiberglass 3/4"	5	Q14	0.030	M.L.F.	192.00	234.00	2008 Qtr 2	8	8 \$	1,872.00
Replace pipe insulation, fiberglass 2"	5	Q14	0.010	M.L.F.	75.50	92.25	2008 Qtr 2	8	8 \$	738.00
Drain and flush water heater, electric, 120 gallon	7	1 Plum	1.000	Ea.	232.00	290.00	2008 Qtr 2	5	5 \$	1,450.00
Check operation water heater, electric, 120 gallon	3	1 Plum	1.000	Ea.	2.03	2.54	2008 Qtr 2	13	13 \$	33.02
Replace water heater, electric, 120 gallon	15	2 Plum	1.000	Ea.	9,077.00	10,415.00	2008 Qtr 2	2	2 \$	20,830.00

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CostWorks 2008 Quarter 2

Design Life= 40		C.S.F=100 S.F; MSF=1000 S.F		This spreadsheet was exported		Terminal Cutoff is the removal of a single task occurrence if that task occurs within 10%				
Average S.F= 5,458		Sq=100 S.F; M.L.F=1000 L.F		from R.S. Means CostWorks		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 In-House	Total Incl. O&P	Release	Occurrences In Design Life	Adjusted Occurrences	Terminal Cutoff
Unclog floor drain, PVC	20	1 Plum	1.000	Ea.	38.00	47.00	2008 Qtr 2	2	1	\$ 47.00
Repair joint pipe and fittings, PVC	10	1 Plum	2.000	Ea.	237.00	294.70	2008 Qtr 2	4	3	\$ 884.10
Replace pipe, 4" pipe and fittings, PVC	30	2 Plum	300.000	L.F.	18,105.00	22,395.00	2008 Qtr 2	1	1	\$ 22,395.00
General maintenance & repair drain: roof, scupper, area	1	1 Plum	2.000	Ea.	58.10	73.10	2008 Qtr 2	40	40	\$ 2,924.00
Replace drain: roof, scupper, area	40	1 Plum	2.000	Ea.	794.00	934.00	2008 Qtr 2	1	0	\$ -
Replace roof mounted exhaust fan, 8500 CFM exhaust fan	20	Q20	1.000	Ea.	2,605.00	3,036.00	2008 Qtr 2	2	1	\$ 3,036.00
Repair single zone rt. unit, 5 ton	10	2 Stpi	1.000	Ea.	1,941.10	2,330.50	2008 Qtr 2	4	3	\$ 6,991.50
Replace single zone rt. unit, 5 ton	15	Q5	1.000	Ea.	7,280.00	8,600.00	2008 Qtr 2	2	2	\$ 17,200.00
Inspect sprinkler system	1	1 Plum	1.000	Ea.	27.20	33.70	2008 Qtr 2	40	40	\$ 1,348.00
Replace sprinkler head	20	1 Plum	45.000	Ea.	2,920.50	3,600.00	2008 Qtr 2	2	1	\$ 3,600.00
Replace fire alarm bell, 6"	20	1 Elec	2.000	Ea.	277.84	335.04	2008 Qtr 2	2	1	\$ 335.04
Maintenance and inspection lighting panel, indoor	3	1 Elec	1.000	Ea.	28.00	35.00	2008 Qtr 2	13	13	\$ 455.00
Maintenance and repair safety switch, 3 pole safety switch, heavy duty	8	1 Elec	1.000	Ea.	28.00	35.00	2008 Qtr 2	5	5	\$ 175.00
Maintenance and inspection safety switch, 3 pole, heavy duty	1	1 Elec	1.000	Ea.	28.00	35.00	2008 Qtr 2	40	40	\$ 1,400.00
Replace safety switch, heavy duty	25	2 Elec	1.000	Ea.	565.03	662.78	2008 Qtr 2	1	1	\$ 662.78
Replace fluor. ballast for fluorescent lighting fixture, 80 W	10	1 Elec	114.000	Ea.	11,084.22	13,369.92	2008 Qtr 2	4	3	\$ 40,109.76
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	114.000	Ea.	2,836.32	3,477.00	2008 Qtr 2	4	3	\$ 10,431.00
Replace fixture fluorescent lighting fixture, 80 W	20	1 Elec	114.000	Ea.	19,839.42	23,971.92	2008 Qtr 2	2	1	\$ 23,971.92
Maintenance and repair receptacles and plugs	20	1 Elec	74.000	Ea.	2,257.00	2,812.00	2008 Qtr 2	2	1	\$ 2,812.00
Replace receptacle/plug receptacles and plugs	20	1 Elec	74.000	Ea.	3,823.58	4,669.40	2008 Qtr 2	2	1	\$ 4,669.40
Maintenance and repair wiring devices, switches	10	1 Elec	19.000	Ea.	579.50	722.00	2008 Qtr 2	4	3	\$ 2,166.00
Replace switch wiring devices, switches	15	1 Elec	19.000	Ea.	953.23	1,160.90	2008 Qtr 2	2	2	\$ 2,321.80
Check and repair manual pull station	10	1 Elec	2.000	Ea.	135.40	166.10	2008 Qtr 2	4	3	\$ 498.30
Replace manual pull station	15	1 Elec	2.000	Ea.	245.84	297.04	2008 Qtr 2	2	2	\$ 594.08
Repair smoke detector	10	1 Elec	15.000	Ea.	561.75	691.50	2008 Qtr 2	4	3	\$ 2,074.50
Check operation smoke detector	1	1 Elec	15.000	Ea.	168.00	210.75	2008 Qtr 2	40	40	\$ 8,430.00
Replace smoke detector	15	1 Elec	15.000	Ea.	2,773.80	3,322.80	2008 Qtr 2	2	2	\$ 6,645.60
					\$2,151,995.34	\$2,599,427.32				
									MR Subtotal	\$ 443,177.13
									MR Per Year	\$ 11,079.43
									PM Per Year	\$770.70
									Subtotal	\$ 11,850.13
									Total Per Unit	\$ 2.17

CostWorks 2009 Quarter 1 - FAC 1732 Training Aids Support Building

Qty	Assembly Number	Description	Total In-House	Total Incl. O&P	Zip Code Prefix	Type	Release
2.000	B2035 225 1950	Door, emergency egress, swinging, annualized	96.00	112.00		FMR	2008 Qtr 2
1.000	B2035 400 1950	Door, overhead, manual, up to 24' high x 25' wide,	147.00	178.00		FMR	2008 Qtr 2
7.000	C1025 110 1950	Fire doors, swinging, annualized	189.00	227.50		FMR	2008 Qtr 2
2.000	D2015 100 1950	Urinals, annualized	26.50	33.10		FMR	2008 Qtr 2
2.000	D2015 100 2950	Toilet (vacuum breaker type), annualized	26.50	33.10		FMR	2008 Qtr 2
2.000	D2015 100 4950	Lavatories, annualized	50.00	61.00		FMR	2008 Qtr 2
1.000	D2015 800 1950	Drink fountain, annualized	50.00	60.00		FMR	2008 Qtr 2
1.000	D5015 260 1950	Panelboard, 225 A and above, annualized	55.50	66.00		FMR	2008 Qtr 2
			\$640.50	\$770.70			

FAC 1732 Sustainment by Year - Terminal Cutoff Applied

