

**Feasibility Study Cost Estimate  
Ricochet Area MRS  
Fort Indiantown Gap Military Reservation**

MRS #	MRS Description	Acreage	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
			No Action	Containment and Controls	Surface Removal with Containment and Controls	Focused Surface Removal with Containment and Controls - (1,334 Acres)	Subsurface Removal to Instrument Detection Depth with Containment and Controls
1	Ricochet Area	3,262	\$0	\$181,998	\$16,182,335	\$6,757,826	\$24,315,156
<b>TOTALS</b>			<b>\$0</b>	<b>\$181,998</b>	<b>\$16,182,335</b>	<b>\$6,757,826</b>	<b>\$24,315,156</b>

**Ricochet Area MRS  
Alternative No: 1  
No Action**

**CAPITAL COST:**

Bid Item No.	Description	QTY	Unit	Team Production (Units/Day)	# Teams	Duration (Weeks)	Weekly Cost Per Team	Total
0100	Work Plans	0.00	LS	N/A	N/A	N/A	99,000	\$0
0110	Explosive Safety Submission	0.00	LS	N/A	N/A	N/A	38,500	\$0
0200	Mobilization	0.00	LS	N/A	N/A	N/A	53,171	\$0
0300	Site Management	0.00	WEEKS	0.0	0.0	0.0	19,576	\$0
0310	Survey/Positioning	0.00	AC	0.0	0.0	0.0	14,890	\$0
0320	Brush Clearing	0.00	AC	0.0	0.0	0.0	10,004	\$0
0400	MEC Surface Removal	0.00	AC	0.0	0.0	0.0	37,793	\$0
0410	MEC Removal to Detection Depth (M&D)	0.00	AC	0.0	0.0	0.0	38,178	\$0
0420	Digital Geophysical Mapping	0.00	AC	0.0	0.0	0.0	19,914	\$0
0430	Geophysical Data Analysis	0.00	AC	0.0	0.0	0.0	18,136	\$0
0440	Anomaly Reacquisition	0.00	AC	0.0	0.0	0.0	4,732	\$0
0450	MEC Subsurface Removal (DGM)	0.00	AC	0.0	0.0	0.0	34,525	\$0
0500	MEC Disposal	0.00	WEEKS	0.0	0.0	0.0	34,195	\$0
0510	Scrap Disposal	0.00	WEEKS	0.0	0.0	0.0	17,587	\$0
0600	Site Restoration	0.00	AC	0.0	0.0	0.0	36,308	\$0
0610	Demobilization	0.00	LS	N/A	N/A	N/A	12,925	\$0
0700	Final Report	0.00	LS	N/A	N/A	N/A	77,000	\$0
0800	Containment and Controls	0.00	LS	N/A	N/A	N/A	42,350	\$0
Sub-Total								\$0
Contingency		15%						\$0
Sub-Total								\$0
Infrastructure Improvements		2%						\$0
Project Management		5%						\$0
Remedial Design		8%						\$0
Construction Management		6%						\$0
<b>Total Capital Cost</b>								<b>\$0</b>

**PERIODIC COST:**

Description	Year	QTY	Unit	Unit Cost	Total
0900 Containment and Controls - Annual Cost	5 - 30	0	LS	1,265	\$0
1000 Five Year Review - First Review	5	0	EA	8,800	\$0
1010 Five Year Review - Years 10,15,20,25 & 30	10 - 30	0	EA	5,500	\$0
1100 Four to Five Year UXO Construction Support	5 - 30	0	EA	24,072	\$0

**PRESENT VALUE ANALYSIS:**

Cost Type	Year	Total Cost	Total Cost Per Year	Discount Factor (%)	Present Value
Capital Cost	0	\$0	\$0	1	\$0
Periodic Cost	5	\$0	\$0	0.854	\$0
Periodic Cost	10	\$0	\$0	0.737	\$0
Periodic Cost	15	\$0	\$0	0.633	\$0
Periodic Cost	20	\$0	\$0	0.543	\$0
Periodic Cost	25	\$0	\$0	0.467	\$0
Periodic Cost	30	\$0	\$0	0.400	\$0
<b>Total Present Value of Alternative</b>					<b>\$0</b>

AC = acres, EA = each, LS = lump sum, N/A = not applicable, WK = week

**Ricochet Area MRS  
Alternative No: 2  
Containment and Controls**

**CAPITAL COST:**

Bid Item No.	Description	QTY	Unit	Team Production (Units/Day)	# Teams	Duration (Weeks)	Weekly Cost Per Team	Total	
0100	Work Plans	0.50	LS	N/A	N/A	N/A	99,000	\$49,500	
0110	Explosive Safety Submission	0.50	LS	N/A	N/A	N/A	38,500	\$19,250	
0200	Mobilization	0.00	LS	N/A	N/A	N/A	53,171	\$0	
0300	Site Management	0.00	WEEKS	0.0	0.0	0.0	19,576	\$0	
0310	Survey/Positioning	0.00	AC	0.0	0.0	0.0	14,890	\$0	
0320	Brush Clearing	0.00	AC	0.0	0.0	0.0	10,004	\$0	
0400	MEC Surface Removal	0.00	AC	0.0	0.0	0.0	37,793	\$0	
0410	MEC Removal to Detection Depth (M&D)	0.00	AC	0.0	0.0	0.0	38,178	\$0	
0420	Digital Geophysical Mapping	0.00	AC	0.0	0.0	0.0	19,914	\$0	
0430	Geophysical Data Analysis	0.00	AC	0.0	0.0	0.0	18,136	\$0	
0440	Anomaly Reacquisition	0.00	AC	0.0	0.0	0.0	4,732	\$0	
0450	MEC Subsurface Removal (DGM)	0.00	AC	0.0	0.0	0.0	34,525	\$0	
0500	MEC Disposal	0.00	WEEKS	0.0	0.0	0.0	34,195	\$0	
0510	Scrap Disposal	0.00	WEEKS	0.0	0.0	0.0	17,587	\$0	
0600	Site Restoration	0.00	AC	0.0	0.0	0.0	36,308	\$0	
0610	Demobilization	0.00	LS	N/A	N/A	N/A	12,925	\$0	
0700	Final Report	0.00	LS	N/A	N/A	N/A	77,000	\$0	
0800	Containment and Controls	1.00	LS	N/A	N/A	N/A	42,350	\$42,350	
Sub-Total								\$111,100	
Contingency		15%							\$16,665
Sub-Total								\$127,765	
Infrastructure Improvements		2%							\$2,555
Project Management		5%							\$6,388
Remedial Design		8%							\$10,221
Construction Management		6%							\$7,666
<b>Total Capital Cost</b>								<b>\$154,596</b>	

**PERIODIC COST:**

Description	Year	QTY	Unit	Unit Cost	Total
0900 Containment and Controls - Annual Cost	5 - 30	1	LS	1,265	\$1,265
1000 Five Year Review - First Review	5	1	EA	8,800	\$8,800
1010 Five Year Review - Years 10,15,20,25 & 30	10 - 30	1	EA	5,500	\$5,500
1100 Four to Five Year UXO Construction Support	5 - 30	0	EA	24,072	\$0

**PRESENT VALUE ANALYSIS:**

Cost Type	Year	Total Cost	Total Cost Per Year	Discount Factor (%)	Present Value
Capital Cost	0	\$154,596	\$154,596	1	\$154,596
Periodic Cost	5	\$10,065	\$10,065	0.854	\$8,596
Periodic Cost	10	\$6,765	\$6,765	0.737	\$4,986
Periodic Cost	15	\$6,765	\$6,765	0.633	\$4,282
Periodic Cost	20	\$6,765	\$6,765	0.543	\$3,673
Periodic Cost	25	\$6,765	\$6,765	0.467	\$3,159
Periodic Cost	30	\$6,765	\$6,765	0.400	\$2,706
		<u>\$198,486</u>			<u>\$181,998</u>
<b>Total Present Value of Alternative</b>					<b>\$181,998</b>

AC = acres, EA = each, LS = lump sum, N/A = not applicable, WK = week

**Ricochet Area MRS  
Alternative No: 3  
Surface Removal of MEC with Containment and Controls**

**CAPITAL COST:**

Bid Item No.	Description	QTY	Unit	Team Production (Units/Day)	# Teams	Duration (Weeks)	Weekly Cost Per Team	Total	
0100	Work Plans	1.00	LS	N/A	N/A	N/A	99,000	\$99,000	
0110	Explosive Safety Submission	1.00	LS	N/A	N/A	N/A	38,500	\$38,500	
0200	Mobilization	1.00	LS	N/A	N/A	N/A	53,171	\$53,171	
0300	Site Management	1.00	WK	1.0	1.0	91	19,576	\$1,785,223	
0310	Survey/Positioning	3,262.00	AC	5.0	2.0	65	14,890	\$971,403	
0320	Brush Clearing	326.20	AC	5.0	1.0	13	10,004	\$130,532	
0400	MEC Surface Removal	3,262.00	AC	3.0	3.0	72	113,379	\$8,218,710	
0410	MEC Removal to Detection Depth (M&D)	0.00	AC	0.0	0.0	0.0	38,178	\$0	
0420	Digital Geophysical Mapping	11.00	AC	0.0	0.0	0.0	19,914	\$0	
0430	Geophysical Data Analysis	11.00	AC	0.0	0.0	0.0	18,136	\$0	
0440	Anomaly Reacquisition	11.00	AC	0.0	0.0	0.0	4,732	\$0	
0450	MEC Subsurface Removal (DGM)	11.00	AC	0.0	0.0	0.0	34,525	\$0	
0500	MEC Disposal	34.32	EA	0.5	1.0	3	34,195	\$117,356	
0510	Scrap Disposal	46.00	EA	0.1	1.0	1	17,587	\$16,180	
0600	Site Restoration	32.62	AC	5.0	1.0	1	36,308	\$47,375	
0610	Demobilization	1.00	LS	N/A	N/A	N/A	12,925	\$12,925	
0700	Final Report	1.00	LS	N/A	N/A	N/A	77,000	\$77,000	
0800	Containment and Controls	1.00	LS	N/A	N/A	N/A	42,350	\$42,350	
Sub-Total								\$11,609,725	
Contingency		15%							\$1,741,459
Sub-Total								\$13,351,184	
Infrastructure Improvements		2%							\$267,024
Project Management		5%							\$667,559
Remedial Design		8%							\$1,068,095
Construction Management		6%							\$801,071
<b>Total Capital Cost</b>								<b>\$16,154,933</b>	

**PERIODIC COST:**

Description	Year	QTY	Unit	Unit Cost	Total
0900 Containment and Controls - Annual Cost	5 - 30	1	LS	1,265	\$1,265
1000 Five Year Review - First Review	5	1	EA	8,800	\$8,800
1010 Five Year Review - Years 10,15,20,25 & 30	10 - 30	1	EA	5,500	\$5,500
1100 Four to Five Year UXO Construction Support	5 - 30	0	EA	24,072	\$0

**PRESENT VALUE ANALYSIS:**

Cost Type	Year	Total Cost	Total Cost Per Year	Discount Factor (%)	Present Value
Capital Cost	0	\$16,154,933	\$16,154,933	1	\$16,154,933
Periodic Cost	5	\$10,065	\$10,065	0.854	\$8,596
Periodic Cost	10	\$6,765	\$6,765	0.737	\$4,986
Periodic Cost	15	\$6,765	\$6,765	0.633	\$4,282
Periodic Cost	20	\$6,765	\$6,765	0.543	\$3,673
Periodic Cost	25	\$6,765	\$6,765	0.467	\$3,159
Periodic Cost	30	\$6,765	\$6,765	0.400	\$2,706
		<u>\$16,198,823</u>			<u>\$16,182,335</u>
<b>Total Present Value of Alternative</b>					<b>\$16,182,335</b>

AC = acres, EA = each, LS = lump sum, N/A = not applicable, WK = week

**Ricochet Area MRS**

**Alternative No: 4**

**Focused Surface Removal (1,334 Acres) and Subsurface Removal (11 acres) of MEC with Containment and Controls**

**CAPITAL COST:**

Bid Item No.	Description	QTY	Unit	Team Production (Units/Day)	# Teams	Duration (Weeks)	Weekly Cost Per Team	Total	
0100	Work Plans	1.00	LS	N/A	N/A	N/A	99,000	\$99,000	
0110	Explosive Safety Submission	1.00	LS	N/A	N/A	N/A	38,500	\$38,500	
0200	Mobilization	1.00	LS	N/A	N/A	N/A	53,171	\$53,171	
0300	Site Management	1.00	WK	1.0	1.0	14	19,576	\$280,579	
0310	Survey/Positioning	1,334.00	AC	5.0	2.0	27	14,890	\$397,257	
0320	Brush Clearing	133.40	AC	3.0	1.0	9	10,004	\$88,969	
0400	MEC Surface Removal	1,334.00	AC	3.0	3.0	30	113,379	\$3,361,054	
0410	MEC Removal to Detection Depth (M&D)	0.00	AC	2.0	3.0	0	114,534	\$0	
0420	Digital Geophysical Mapping	11.00	AC	1.0	1.0	2.2	19,914	\$43,812	
0430	Geophysical Data Analysis	11.00	AC	2.0	1.0	1.1	18,136	\$19,950	
0440	Anomaly Reacquisition	11.00	AC	100.0	1.0	2.2	4,732	\$10,411	
0450	MEC Subsurface Removal (DGM)	11.00	AC	100.0	1.0	2.2	34,525	\$75,955	
0500	MEC Disposal	34.32	EA	0.5	1.0	3	34,195	\$117,356	
0510	Scrap Disposal	46.00	EA	0.1	1.0	1	17,587	\$16,180	
0600	Site Restoration	16.31	AC	3.0	1.0	1	36,308	\$39,479	
0610	Demobilization	1.00	LS	N/A	N/A	N/A	12,925	\$12,925	
0700	Final Report	1.00	LS	N/A	N/A	N/A	77,000	\$77,000	
0800	Containment and Controls	1.00	LS	N/A	N/A	N/A	42,350	\$42,350	
Sub-Total								\$4,773,946	
Contingency		15%							\$716,092
Sub-Total								\$5,490,038	
Infrastructure Improvements		2%							\$109,801
Project Management		5%							\$274,502
Remedial Design		8%							\$439,203
Construction Management		6%							\$329,402
<b>Total Capital Cost</b>								<b>\$6,642,946</b>	

**PERIODIC COST:**

Description	Year	QTY	Unit	Unit Cost	Total
0900 Containment and Controls - Annual Cost	5 - 30	1	LS	1,265	\$1,265
1000 Five Year Review - First Review	5	1	EA	8,800	\$8,800
1010 Five Year Review - Years 10,15,20,25 & 30	10 - 30	1	EA	5,500	\$5,500
1100 Four to Five Year UXO Construction Support	5 - 30	1	EA	24,072	\$24,072

**PRESENT VALUE ANALYSIS:**

Cost Type	Year	Total Cost	Total Cost Per Year	Discount Factor (%)	Present Value
Capital Cost	0	\$6,642,946	\$6,642,946	1	\$6,642,946
Periodic Cost	5	\$34,137	\$34,137	0.854	\$29,153
Periodic Cost	10	\$30,837	\$30,837	0.737	\$22,727
Periodic Cost	15	\$30,837	\$30,837	0.633	\$19,520
Periodic Cost	20	\$30,837	\$30,837	0.543	\$16,745
Periodic Cost	25	\$30,837	\$30,837	0.467	\$14,401
Periodic Cost	30	\$30,837	\$30,837	0.400	\$12,335
		<u>\$6,831,269</u>			<u>\$6,757,826</u>
<b>Total Present Value of Alternative</b>					<b>\$6,757,826</b>

AC = acres, EA = each, LS = lump sum, N/A = not applicable, WK = week

**Ricochet Area MRS  
Alternative No: 5  
Subsurface Removal of MEC to Instrument Detection Depth with Containment and Controls**

**CAPITAL COST:**

Bid Item No.	Description	QTY	Unit	Team Production (Units/Day)	# Teams	Duration (Weeks)	Weekly Cost Per Team	Total	
0100	Work Plans	1.00	LS	N/A	N/A	N/A	99,000	\$99,000	
0110	Explosive Safety Submission	1.00	LS	N/A	N/A	N/A	38,500	\$38,500	
0200	Mobilization	1.00	LS	N/A	N/A	N/A	53,171	\$53,171	
0300	Site Management	1.00	WK	1.0	1.0	149	19,576	\$2,910,716	
0310	Survey/Positioning	3,250.00	AC	5.0	2.0	65	14,890	\$967,830	
0320	Brush Clearing	325.00	AC	3.0	1.0	22	10,004	\$216,753	
0400	MEC Surface Removal	0.00	AC	0.0	0.0	0	37,793	\$0	
0410	MEC Removal to Detection Depth (M&D)	3,250.00	AC	2.0	3.0	108	114,534	\$12,407,838	
0420	Digital Geophysical Mapping	11.00	AC	0.0	0.0	0.0	19,914	\$0	
0430	Geophysical Data Analysis	11.00	AC	0.0	0.0	0.0	18,136	\$0	
0440	Anomaly Reacquisition	11.00	AC	0.0	0.0	0.0	4,732	\$0	
0450	MEC Subsurface Removal (DGM)	11.00	AC	0.0	0.0	0.0	34,525	\$0	
0500	MEC Disposal	52.00	EA	0.8	2.0	16	34,195	\$533,439	
0510	Scrap Disposal	46.00	EA	0.1	1.0	1	17,587	\$16,180	
0600	Site Restoration	32.50	AC	3.0	1.0	2	36,308	\$78,667	
0610	Demobilization	1.00	LS	N/A	N/A	N/A	12,925	\$12,925	
0700	Final Report	1.00	LS	N/A	N/A	N/A	77,000	\$77,000	
0800	Containment and Controls	1.00	LS	N/A	N/A	N/A	42,350	\$42,350	
Sub-Total								\$17,454,368	
Contingency		15%							\$2,618,155
Sub-Total								\$20,072,523	
Infrastructure Improvements		2%							\$401,450
Project Management		5%							\$1,003,626
Remedial Design		8%							\$1,605,802
Construction Management		6%							\$1,204,351
<b>Total Capital Cost</b>								<b>\$24,287,753</b>	

**PERIODIC COST:**

Description	Year	QTY	Unit	Unit Cost	Total
0900 Containment and Controls - Annual Cost	5 - 30	1	LS	1,265	\$1,265
1000 Five Year Review - First Review	5	1	EA	8,800	\$8,800
1010 Five Year Review - Years 10,15,20,25 & 30	10 - 30	1	EA	5,500	\$5,500
1100 Four to Five Year UXO Construction Support	5 - 30	0	EA	24,072	\$0

**PRESENT VALUE ANALYSIS:**

Cost Type	Year	Total Cost	Total Cost Per Year	Discount Factor (%)	Present Value
Capital Cost	0	\$24,287,753	\$24,287,753	1	\$24,287,753
Periodic Cost	5	\$10,065	\$10,065	0.854	\$8,596
Periodic Cost	10	\$6,765	\$6,765	0.737	\$4,986
Periodic Cost	15	\$6,765	\$6,765	0.633	\$4,282
Periodic Cost	20	\$6,765	\$6,765	0.543	\$3,673
Periodic Cost	25	\$6,765	\$6,765	0.467	\$3,159
Periodic Cost	30	\$6,765	\$6,765	0.400	\$2,706
		<u>\$24,331,643</u>			<u>\$24,315,156</u>
<b>Total Present Value of Alternative</b>					<b>\$24,315,156</b>

AC = acres, EA = each, LS = lump sum, N/A = not applicable, WK = week

**Feasibility Study Cost Estimate  
Ricochet Area**

Ricochet Area MRS FS Cost Estimate												Total	Subtotal +	Total	
ACT ID	WORK DESCRIPTION	qty	unit	Raw \$ per	HO Straight LABOR \$	Field Straight LABOR \$	TRAVEL	EQUIP	SUBS	INTS	EXTS	SUBTOTAL COST	Raw	10%	Effort
<b>0100</b>	<b>Work Plans (incl. draft, draft-final, &amp; final)</b>												<b>\$90,000.00</b>		<b>\$99,000.00</b>
	WP/APP/SSHP & GSV	1	LS	90,000.00					\$90,000.00			\$90,000.00		\$99,000.00	
<b>0110</b>	<b>Explosives Safety Submission (incl. draft, draft-final, &amp; final)</b>												<b>\$35,000.00</b>		<b>\$38,500.00</b>
	Explosives Safety Submission	1	LS	35,000.00					\$35,000.00			\$35,000.00		\$38,500.00	
<b>0200</b>	<b>Mobilization (1 UXO Team [10hrs mob, 10hrs demob, mob per diem], Site Management Staff [40hrs mob, site prep, demob, mob per diem])</b>												<b>\$31,029.31</b>		<b>\$53,171.13</b>
	UXO Tech II (6 ea) (ST)	60	HR	33.21		\$1,992.65						\$1,992.65		\$3,985.30	
	UXO Tech II (6 ea) (OT)	60	HR	49.82		\$2,988.97						\$2,988.97		\$5,977.94	
	UXO Tech III (ST)	10	HR	39.11		\$391.08						\$391.08		\$782.15	
	UXO Tech III (OT)	10	HR	58.66		\$586.61						\$586.61		\$1,173.23	
	UXOSO/QCS (ST)	80	HR	40.11		\$3,208.61						\$3,208.61		\$6,417.22	
	UXOSO/QCS (OT)	20	HR	60.16		\$1,203.23						\$1,203.23		\$2,406.46	
	SUXOS (ST)	40	HR	44.11		\$1,764.30						\$1,764.30		\$3,528.61	
	SUXOS (OT)	10	HR	66.16		\$661.61						\$661.61		\$1,323.23	
	Sub: Mob Misc Equipment	5	EA	500.00				\$2,500.00				\$2,500.00		\$2,750.00	
	Misc ODCs	10	DY	100.00							\$1,000.00	\$1,000.00		\$1,100.00	
	Equip & Supplies	2	LS	1,000.00							\$2,000.00	\$2,000.00		\$2,200.00	
	Pickup Truck 4x4 w/FOG (2 ea)	14	DY	80.00				\$1,120.00				\$1,120.00		\$1,232.00	
	Per Diem	63	DY	150.00			\$9,450.00					\$9,450.00		\$10,395.00	
	Mob Allowance per Person	9	EA	1,000.00							\$9,000.00	\$9,000.00		\$9,900.00	
<b>0300</b>	<b>Site Management (5-10hr days, per diem @ 7 dys/wk)</b>												<b>\$12,305.84</b>		<b>\$19,576.17</b>
	UXOSO (ST)	40	HR	40.11		\$1,604.30						\$1,604.30		\$3,208.61	
	UXOSO (OT)	10	HR	60.16		\$601.61						\$601.61		\$1,203.23	
	UXOQCS (ST)	40	HR	37.80		\$1,512.00						\$1,512.00		\$3,024.00	
	UXOQCS (OT)	10	HR	56.70		\$567.00						\$567.00		\$1,134.00	
	SUXOS (ST)	40	HR	44.11		\$1,764.30						\$1,764.30		\$3,528.61	
	SUXOS (OT)	10	HR	66.16		\$661.61						\$661.61		\$1,323.23	
	Computer	5	DY	10.00				\$50.00				\$50.00		\$55.00	
	Copier/Fax	5	DY	5.00				\$25.00				\$25.00		\$27.50	
	Printer	5	DY	10.00				\$50.00				\$50.00		\$55.00	
	Internet Service	5	DY	5.00					\$25.00			\$25.00		\$27.50	
	Generator w/FOG	5	DY	40.00				\$200.00				\$200.00		\$220.00	
	Port-a-John	5	DY	10.00				\$50.00				\$50.00		\$55.00	
	Storm Detector	5	DY	80.00				\$400.00				\$400.00		\$440.00	
	Pickup Truck 4x4 w/FOG (2 ea)	14	DY	80.00				\$1,120.00				\$1,120.00		\$1,232.00	
	SUV 4x4 w/FOG	7	DY	90.00				\$630.00				\$630.00		\$693.00	
	Storage Box (CONEX)	7	DY	15.00				\$105.00				\$105.00		\$115.50	
	Consumable Supplies	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Cell Phone	5	DY	5.00							\$25.00	\$25.00		\$27.50	
	Project Phone Service	5	DY	10.00							\$50.00	\$50.00		\$55.00	
	GPS - Hand Held	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Radios	7	DY	20.00							\$140.00	\$140.00		\$154.00	
	Mechanics Tool Kit	5	DY	5.00							\$25.00	\$25.00		\$27.50	
	Demolition Tool Kit	5	LS	20.00							\$100.00	\$100.00		\$110.00	
	Per Diem	14	DY	150.00			\$2,100.00					\$2,100.00		\$2,310.00	

**Feasibility Study Cost Estimate  
Ricochet Area**

Ricochet Area MRS FS Cost Estimate												Total	Subtotal +	Total	
ACT ID	WORK DESCRIPTION	qty	unit	Raw \$ per	HO Straight LABOR \$	Field Straight LABOR \$	TRAVEL	EQUIP	SUBS	INTS	EXTS	SUBTOTAL COST	Raw	10%	Effort
<b>0310</b>	<b>Survey/Positioning (UXO Tech II escort required for survey crew, 5-10hr dys, per diem @ 7 dys/wk)</b>												<b>\$12,041.59</b>		<b>\$14,889.69</b>
	UXO Tech II (ST)	40	HR	33.21		\$1,328.43						\$1,328.43		\$2,656.86	
	UXO Tech II (OT)	10	HR	49.82		\$498.16						\$498.16		\$996.32	
	Survey Sub	5	DY	1,500.00					\$7,500.00			\$7,500.00		\$8,250.00	
	SUV 4x4 w/FOG	5	DY	90.00				\$450.00				\$450.00		\$495.00	
	Surveyors Kit	5	DY	100.00				\$500.00				\$500.00		\$550.00	
	Misc Small Tools/Equip	5	DY	50.00				\$250.00				\$250.00		\$275.00	
	Computer	5	DY	10.00				\$50.00				\$50.00		\$55.00	
	Consumable Supplies	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Schonstedt	5	DY	10.00							\$50.00	\$50.00		\$55.00	
	FOG	5	GL	3.00							\$15.00	\$15.00		\$16.50	
	Radios	5	DY	20.00							\$100.00	\$100.00		\$110.00	
	Per Diem	7	DY	150.00			\$1,050.00					\$1,050.00		\$1,155.00	
<b>0320</b>	<b>Brush Clearing (5-10hr dys, per diem @ 7 dys/wk)</b>												<b>\$6,727.74</b>		<b>\$10,003.97</b>
	UXO Tech II (ST)	40	HR	33.21		\$1,328.43						\$1,328.43		\$2,656.86	
	UXO Tech III (ST)	40	HR	39.11		\$1,564.30						\$1,564.30		\$3,128.61	
	Brush Cutter, Power	5	DY	15.00				\$75.00				\$75.00		\$82.50	
	Chain Saw	5	DY	15.00				\$75.00				\$75.00		\$82.50	
	Gator ATV	5	DY	40.00				\$200.00				\$200.00		\$220.00	
	FOG	50	GL	3.00							\$150.00	\$150.00		\$165.00	
	Consumable Supplies	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Misc Small Tools/Equip	5	DY	50.00				\$250.00				\$250.00		\$275.00	
	Mechanics Tool Kit	5	DY	5.00							\$25.00	\$25.00		\$27.50	
	Pickup Truck 4x4 w/FOG	7	DY	80.00				\$560.00				\$560.00		\$616.00	
	Radios	5	DY	20.00							\$100.00	\$100.00		\$110.00	
	Schonstedt	5	DY	10.00							\$50.00	\$50.00		\$55.00	
	Per Diem	14	DY	150.00			\$2,100.00					\$2,100.00		\$2,310.00	
<b>0400</b>	<b>MEC Surface Removal (5-10hr dys, per diem @ 7 dys/wk)</b>												<b>\$23,630.48</b>		<b>\$37,792.96</b>
	UXO Tech II (6 ea) (ST)	240	HR	33.21		\$7,970.59						\$7,970.59		\$15,941.18	
	UXO Tech II (6 ea) (OT)	60	HR	49.82		\$2,988.97						\$2,988.97		\$5,977.94	
	UXO Tech III (ST)	40	HR	39.11		\$1,564.30						\$1,564.30		\$3,128.61	
	UXO Tech III (OT)	10	HR	58.66		\$586.61						\$586.61		\$1,173.23	
	Pickup Truck 4x4 w/FOG (2 ea)	14	DY	80.00				\$1,120.00				\$1,120.00		\$1,232.00	
	Gator ATV	5	DY	40.00				\$200.00				\$200.00		\$220.00	
	FOG	50	GL	3.00							\$150.00	\$150.00		\$165.00	
	Consumable Supplies	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Schonstedt (6 ea)	30	DY	10.00							\$300.00	\$300.00		\$330.00	
	GPS - Hand Held	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Hand Held PDA (2)	10	DY	50.00							\$500.00	\$500.00		\$550.00	
	Radios	5	DY	20.00							\$100.00	\$100.00		\$110.00	
	Computer	5	DY	10.00				\$50.00				\$50.00		\$55.00	
	Misc. H&S Equip	5	DY	50.00				\$250.00				\$250.00		\$275.00	
	Per Diem	49	DY	150.00			\$7,350.00					\$7,350.00		\$8,085.00	

**Feasibility Study Cost Estimate  
Ricochet Area**

Ricochet Area MRS FS Cost Estimate												Total		Total	
ACT ID	WORK DESCRIPTION	qty	unit	Raw \$ per	HO Straight LABOR \$	Field Straight LABOR \$	TRAVEL	EQUIP	SUBS	INTS	EXTS	SUBTOTAL COST	Raw	Subtotal + 10%	Effort
<b>0410</b>	<b>MEC Removal to Detection Depth (M&amp;D) (5-10hr dys, per diem @ 7 dys/wk)</b>												<b>\$23,980.48</b>		<b>\$38,177.96</b>
	UXO Tech II (6 ea) (ST)	240	HR	33.21		\$7,970.59						\$7,970.59		\$15,941.18	
	UXO Tech II (6 ea) (OT)	60	HR	49.82		\$2,988.97						\$2,988.97		\$5,977.94	
	UXO Tech III (ST)	40	HR	39.11		\$1,564.30						\$1,564.30		\$3,128.61	
	UXO Tech III (OT)	10	HR	58.66		\$586.61						\$586.61		\$1,173.23	
	Pickup Truck 4x4 w/FOG (2 ea)	14	DY	80.00				\$1,120.00				\$1,120.00		\$1,232.00	
	Gator ATV	5	DY	40.00				\$200.00				\$200.00		\$220.00	
	FOG	100	GL	3.00							\$300.00	\$300.00		\$330.00	
	Schonstedt (6 ea)	30	DY	10.00							\$300.00	\$300.00		\$330.00	
	GPS - Hand Held	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Hand Held PDA	10	DY	50.00							\$500.00	\$500.00		\$550.00	
	Radios	5	DY	20.00							\$100.00	\$100.00		\$110.00	
	Consumable Supplies	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Misc. H&S Equip	5	DY	50.00				\$250.00				\$250.00		\$275.00	
	Excavation Tool Kit	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Per Diem	49	DY	150.00			\$7,350.00					\$7,350.00		\$8,085.00	
<b>0420</b>	<b>Digital Geophysical Mapping (DGM) (5-10hr dys, per diem @ 7 dys/wk)</b>												<b>\$13,644.99</b>		<b>\$19,914.49</b>
	Geophysical Technician (ST)	40	HR	30.24		\$1,209.60						\$1,209.60		\$2,419.20	
	Geophysical Technician (OT)	10	HR	45.36		\$453.60						\$453.60		\$907.20	
	Site Geophysicist (ST)	40	HR	35.64		\$1,425.60						\$1,425.60		\$2,851.20	
	Site Geophysicist (OT)	10	HR	53.46		\$534.60						\$534.60		\$1,069.20	
	UXO Tech II (ST)	40	HR	33.21		\$1,328.43						\$1,328.43		\$2,656.86	
	UXO Tech II (OT)	10	HR	49.82		\$498.16						\$498.16		\$996.32	
	Computer	5	DY	10.00				\$50.00				\$50.00		\$55.00	
	Internet Service	5	DY	5.00					\$25.00			\$25.00		\$27.50	
	Magnetometer	5	DY	125.00				\$625.00				\$625.00		\$687.50	
	TDEM Detector	5	DY	125.00				\$625.00				\$625.00		\$687.50	
	Positioning	5	DY	225.00				\$1,125.00				\$1,125.00		\$1,237.50	
	Consumable Supplies	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Radios	5	DY	20.00							\$100.00	\$100.00		\$110.00	
	GPS - RTK	5	DY	225.00							\$1,125.00	\$1,125.00		\$1,237.50	
	Pickup Truck 4x4 w/FOG (2 ea)	14	DY	80.00				\$1,120.00				\$1,120.00		\$1,232.00	
	Per Diem	21	DY	150.00			\$3,150.00					\$3,150.00		\$3,465.00	
<b>0430</b>	<b>Geophysical Data Analysis (5-10hr dys, per diem @ 7 dys/wk)</b>												<b>\$10,890.50</b>		<b>\$18,136.01</b>
	Project Geophysicist (ST)	40	HR	56.33		\$2,253.31						\$2,253.31		\$4,506.62	
	Project Geophysicist (OT)	10	HR	84.50		\$844.99						\$844.99		\$1,689.98	
	Site Geophysicist (ST)	40	HR	35.64		\$1,425.60						\$1,425.60		\$2,851.20	
	Site Geophysicist (OT)	10	HR	53.46		\$534.60						\$534.60		\$1,069.20	
	CADD/GIS Operator (ST)	40	HR	32.40		\$1,296.00						\$1,296.00		\$2,592.00	
	CADD/GIS Operator (OT)	10	HR	48.60		\$486.00						\$486.00		\$972.00	
	Cell Phone	5	DY	5.00							\$25.00	\$25.00		\$27.50	
	Computer	5	DY	10.00				\$50.00				\$50.00		\$55.00	
	Internet Service	5	DY	5.00					\$25.00			\$25.00		\$27.50	
	Printer	5	DY	10.00				\$50.00				\$50.00		\$55.00	
	SUV 4x4 w/FOG	5	DY	90.00				\$450.00				\$450.00		\$495.00	
	Consumable Supplies	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Project Phone Service	5	DY	10.00							\$50.00	\$50.00		\$55.00	
	Per Diem	21	DY	150.00			\$3,150.00					\$3,150.00		\$3,465.00	

**Feasibility Study Cost Estimate  
Ricochet Area**

Ricochet Area MRS FS Cost Estimate												Total	Subtotal +	Total	
ACT ID	WORK DESCRIPTION	qty	unit	Raw \$ per	HO Straight LABOR \$	Field Straight LABOR \$	TRAVEL	EQUIP	SUBS	INTS	EXTS	SUBTOTAL COST	Raw	10%	Effort
<b>0440</b>	<b>Anomaly Re-Acquisition (5-10hr dys, per diem @ 7 dys/wk)</b>												<b>\$4,166.05</b>		<b>\$4,732.11</b>
	UXO Tech II	5	HR	33.21		\$166.05						\$166.05		\$332.11	
	Consumable Supplies	5	DY	50.00								\$250.00		\$275.00	
	GPS - RTK	5	DY	225.00								\$1,125.00		\$1,237.50	
	USRAD	5	DY	225.00							\$1,125.00		\$1,237.50		
	SUV 4x4 w/FOG	5	DY	90.00							\$450.00		\$495.00		
	Per Diem	7	DY	150.00			\$1,050.00				\$1,050.00		\$1,155.00		
<b>0450</b>	<b>MEC Subsurface Removal (DGM) (5-10hr dys, per diem @ 7 dys/wk)</b>												<b>\$22,153.89</b>		<b>\$34,524.78</b>
	UXO Tech II (6) (ST)	200	HR	33.21		\$6,642.16						\$6,642.16		\$13,284.32	
	UXO Tech II (6) (OT)	50	HR	49.82		\$2,490.81						\$2,490.81		\$4,981.62	
	UXO Tech III (ST)	40	HR	39.11		\$1,564.30						\$1,564.30		\$3,128.61	
	UXO Tech III (OT)	10	HR	58.66		\$586.61						\$586.61		\$1,173.23	
	Heavy Equip Operator (ST)	0	HR	29.28		\$0.00						\$0.00		\$0.00	
	Heavy Equip Operator (OT)	0	HR	43.91		\$0.00						\$0.00		\$0.00	
	Pickup Truck 4x4 w/FOG (2 ea)	14	DY	80.00							\$1,120.00		\$1,232.00		
	Universal Loader/Backhoe w/FOG	0	DY	60.00							\$0.00		\$0.00		
	Trailer Flat Bed	0	DY	15.00							\$0.00		\$0.00		
	Gator ATV	5	DY	40.00							\$200.00		\$220.00		
	FOG	100	GL	3.00							\$300.00		\$330.00		
	Schonstedt (6 ea)	30	DY	10.00							\$300.00		\$330.00		
	GPS - Hand Held	5	DY	50.00							\$250.00		\$275.00		
	Hand Held PDA	10	DY	50.00							\$500.00		\$550.00		
	Radios	5	DY	20.00							\$100.00		\$110.00		
	Consumable Supplies	5	DY	50.00							\$250.00		\$275.00		
	Misc. H&S Equip	5	DY	50.00							\$250.00		\$275.00		
	Excavation Tool Kit	5	DY	50.00							\$250.00		\$275.00		
	Per Diem	49	DY	150.00			\$7,350.00				\$7,350.00		\$8,085.00		
<b>0500</b>	<b>MEC Disposal (5-10hr dys, per diem @ 7 dys/wk)</b>												<b>\$21,853.89</b>		<b>\$34,194.78</b>
	UXO Tech II (6 ea) (ST)	200	HR	33.21		\$6,642.16						\$6,642.16		\$13,284.32	
	UXO Tech II (6 ea) (OT)	50	HR	49.82		\$2,490.81						\$2,490.81		\$4,981.62	
	UXO Tech III (ST)	40	HR	39.11		\$1,564.30						\$1,564.30		\$3,128.61	
	UXO Tech III (OT)	10	HR	58.66		\$586.61						\$586.61		\$1,173.23	
	Pickup Truck 4x4 w/FOG (2 ea)	14	DY	80.00							\$1,120.00		\$1,232.00		
	Gator ATV	5	DY	40.00							\$200.00		\$220.00		
	Hand Held PDA	10	DY	50.00							\$500.00		\$550.00		
	Radios	5	DY	20.00							\$100.00		\$110.00		
	Misc ODCs (picks & shovels)	5	DY	30.00							\$150.00		\$165.00		
	Misc. H&S Equip	5	DY	50.00							\$250.00		\$275.00		
	Donor Explosives	5	DY	100.00							\$500.00		\$550.00		
	Explosives Vehicle	5	DY	80.00							\$400.00		\$440.00		
	Per Diem	49	DY	150.00			\$7,350.00				\$7,350.00		\$8,085.00		
<b>0510</b>	<b>Scrap Disposal (5-10hr dys, per diem @ 7 dys/wk)</b>												<b>\$11,239.11</b>		<b>\$17,586.71</b>
	UXO Tech II (2 ea) (ST)	80	HR	33.21		\$2,656.86						\$2,656.86		\$5,313.73	
	UXO Tech II (2 ea) (OT)	20	HR	49.82		\$996.32						\$996.32		\$1,992.65	
	UXO Tech III (ST)	40	HR	39.11		\$1,564.30						\$1,564.30		\$3,128.61	
	UXO Tech III (OT)	10	HR	58.66		\$586.61						\$586.61		\$1,173.23	
	Pickup Truck 4x4 w/FOG	7	DY	80.00							\$560.00		\$616.00		
	Gator ATV	5	DY	40.00							\$200.00		\$220.00		
	FOG	50	GL	3.00							\$150.00		\$165.00		
	Radios	5	DY	20.00							\$100.00		\$110.00		
	Misc ODCs (picks & shovels)	5	DY	30.00							\$150.00		\$165.00		
	Recycler - Scrap Disposal	5	DY	225.00							\$1,125.00		\$1,237.50		
	Per Diem	21	DY	150.00			\$3,150.00				\$3,150.00		\$3,465.00		

**Feasibility Study Cost Estimate  
Ricochet Area**

Ricochet Area MRS FS Cost Estimate												Total	Subtotal +	Total	
ACT ID	WORK DESCRIPTION	qty	unit	Raw \$ per	HO Straight LABOR \$	Field Straight LABOR \$	TRAVEL	EQUIP	SUBS	INTS	EXTS	SUBTOTAL COST	Raw	10%	Effort
<b>0600</b>	<b>Site Restoration (2 Laborers required to fill and compact holes left from anomaly investigation)</b>												<b>\$22,280.48</b>		<b>\$36,307.96</b>
	UXO Tech II (6 ea) (ST)	240	HR	33.21		\$7,970.59						\$7,970.59		\$15,941.18	
	UXO Tech II (6 ea) (OT)	60	HR	49.82		\$2,988.97						\$2,988.97		\$5,977.94	
	UXO Tech III (ST)	40	HR	39.11		\$1,564.30						\$1,564.30		\$3,128.61	
	UXO Tech III (OT)	10	HR	58.66		\$586.61						\$586.61		\$1,173.23	
	Pickup Truck 4x4 w/FOG (2 ea)	14	DY	80.00				\$1,120.00				\$1,120.00		\$1,232.00	
	Misc Small Tools/Equip	5	DY	40.00				\$200.00				\$200.00		\$220.00	
	Fill Materials	50	CY	10.00							\$500.00	\$500.00		\$550.00	
	Per Diem	49	DY	150.00			\$7,350.00					\$7,350.00		\$8,085.00	
<b>0610</b>	<b>Demobilization (Demob expenses)</b>												<b>\$11,750.00</b>		<b>\$12,925.00</b>
	Sub: Demob Misc Equipment	5	EA	500.00				\$2,500.00				\$2,500.00		\$2,750.00	
	Misc ODCs	5	DY	50.00							\$250.00	\$250.00		\$275.00	
	Demob Allowance per Person	9	EA	1,000.00							\$9,000.00	\$9,000.00		\$9,900.00	
<b>0700</b>	<b>Final Report (incl. draft, draft-final, &amp; final)</b>												<b>\$70,000.00</b>		<b>\$77,000.00</b>
	Final Report	1	LS	70,000.00				\$70,000.00				\$70,000.00		\$77,000.00	
<b>0800</b>	<b>Containment and Controls</b>												<b>\$38,500.00</b>		<b>\$42,350.00</b>
	Containment and Controls Plan	1	EA	5,000.00				\$5,000.00				\$5,000.00		\$5,500.00	
	Signs	20	EA	150.00				\$3,000.00				\$3,000.00		\$3,300.00	
	Brochure/Fact Sheet	2	LS	1,000.00				\$2,000.00				\$2,000.00		\$2,200.00	
	Prepare & Distribute Videos/DVDs	1	LS	20,000.00				\$20,000.00				\$20,000.00		\$22,000.00	
	Update Websites	2	LS	2,000.00				\$4,000.00				\$4,000.00		\$4,400.00	
	TRC (per mtg)	3	LS	1,500.00				\$4,500.00				\$4,500.00		\$4,950.00	
<b>0900</b>	<b>Containment and Controls - Annual Cost</b>												<b>\$1,150.00</b>		<b>\$1,265.00</b>
	Signs	1	EA	150.00				\$150.00				\$150.00		\$165.00	
	Brochure/Fact Sheet	0.5	LS	1,000.00				\$500.00				\$500.00		\$550.00	
	Prepare & Distribute Videos/DVDs	0.5	LS	500.00				\$250.00				\$250.00		\$275.00	
	TRC (per mtg)	0.5	LS	500.00				\$250.00				\$250.00		\$275.00	
<b>1000</b>	<b>5Y Review - 1st Review</b>												<b>\$8,000.00</b>		<b>\$8,800.00</b>
	Recurring Review Plan	1	EA	3,000.00				\$3,000.00				\$3,000.00		\$3,300.00	
	Document Reviews	1	EA	1,000.00				\$1,000.00				\$1,000.00		\$1,100.00	
	Site Inspection	1	EA	2,000.00				\$2,000.00				\$2,000.00		\$2,200.00	
	Report	1	EA	2,000.00				\$2,000.00				\$2,000.00		\$2,200.00	
<b>1010</b>	<b>5Y Rev - Remaining Reviews</b>												<b>\$5,000.00</b>		<b>\$5,500.00</b>
	Document Reviews	1	EA	1,000.00				\$1,000.00				\$1,000.00		\$1,100.00	
	Site Inspection	1	EA	2,000.00				\$2,000.00				\$2,000.00		\$2,200.00	
	Report	1	EA	2,000.00				\$2,000.00				\$2,000.00		\$2,200.00	
<b>1100</b>	<b>UXO Construction Support</b>												<b>\$15,375.02</b>		<b>\$24,072.05</b>
	UXO Tech II (ST)	80	HR	33.21		\$2,656.86						\$2,656.86		\$5,313.73	
	UXO Tech II (OT)	20	HR	49.82		\$996.32						\$996.32		\$1,992.65	
	UXO Tech III (ST)	80	HR	39.11		\$3,128.61						\$3,128.61		\$6,257.22	
	UXO Tech III (OT)	20	HR	58.66		\$1,173.23						\$1,173.23		\$2,346.46	
	Pickup Truck 4x4 w/FOG (2 ea)	14	DY	80.00				\$1,120.00				\$1,120.00		\$1,232.00	
	Hand Held PDA	14	DY	50.00							\$700.00	\$700.00		\$770.00	
	Radios	14	DY	20.00							\$280.00	\$280.00		\$308.00	
	Misc ODCs (picks & shovels)	14	DY	30.00				\$420.00				\$420.00		\$462.00	
	Misc. H&S Equip	14	DY	50.00				\$700.00				\$700.00		\$770.00	
	Donor Explosives	0	DY	100.00							\$0.00	\$0.00		\$0.00	
	Explosives Vehicle	0	DY	80.00				\$0.00				\$0.00		\$0.00	
	Per Diem	28	DY	150.00			\$4,200.00					\$4,200.00		\$4,620.00	