

1
2

3
4

**APPENDIX A: CLASS C COST ESTIMATE AND PHASING FOR
THE PREFERRED ALTERNATIVE**

1 CLASS C COST ESTIMATE

2

Class C Construction Cost Estimate

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands

Park: Apostle Islands National Lakeshore

PMIS: 154596

Preferred Alternative

Basis of Estimate

Date of Estimate: March 4, 2011

Estimated By: Parametrix, Inc.
7186 South Highland Drive #200
Salt Lake City, Utah
(801) 733-5900

Supporting Material: Design Team Narrative & Matrices
Site Concept Plans
Historic Drawings & Photographs
Site Estimate - Per Landscape Architect
Hazmat Estimate - Per Consultant

Cost Data: Parametrix National Cost Data Base - 2011

Mark-ups and Add-ons: **Published Location Factor:** Apostle Islands National Lakeshore - Bayfield, Wisconsin - Negative 5.3 Percent.
Project Remoteness:
Michigan Island, 17 Miles - 20 Percent.
Outer Island, 32 Miles - 25 Percent.
Devils Island, 23 Miles - 20 Percent.
Long Island, 6 Miles - 20 Percent.
Sand Island, 19 Miles - 20 Percent.
Federal Wage Rate Factor: Included in Labor Costs - 7.5 Percent.
Design Contingency: Concept Documents - 20 Percent
Taxes: Sales Tax Included in Costs - 5.5 Percent.
Standard General Conditions: Remote Location - 14 Percent.
Government General Conditions: Remote Location - 8 Percent.
Bonds and Permits: No Permit Costs. Bond - 2 Percent.
Historic Preservation Factor: 15 Percent.
Overhead: Medium Size Project - 10 Percent.
Profit: Medium Size Project - 10 Percent.
Contracting Method Adjustment: Early Indication is that Construction Contract will be Pre-Qualified Open Competitive - 5 Percent.
Inflation Escalation: Assume Start of Construction to be May 2012.
18 Month Construction Period. Inflation Predictions Indicate 4 Percent per year.

Comments: Class C Construction Cost Estimate Based on;
Design Team Narrative & Matrices
Site Concept Plans
Historic Drawings & Photographs
Site Estimate - Per Landscape Architect
Hazmat Estimate - Per Consultant

Cost Estimate Includes Logistics to the Various Sites.
Material, Labor & Equipment (Including Waste) will Require Boat Transportation & Docking.
Cost Estimate Includes Weather Delays and a Seasonal Construction Time Frame.

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Date: March 4, 2011

Estimate is Based on 2011 Costs

MASTER SUMMARY

Item	Description	Direct Cost	Total Net
	MICHIGAN ISLAND	\$894,124	\$2,322,946
	OUTER ISLAND	\$446,878	\$1,202,923
	DEVILS ISLAND	\$750,032	\$1,948,594
	LONG ISLAND	\$538,468	\$1,398,947
	SAND ISLAND	\$269,115	\$699,164
	TOTAL	\$2,898,616	\$7,572,574

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SUMMARY - MICHIGAN ISLAND

Item	Description	Direct Cost	Total Net
	MICHIGAN ISLAND - Site Improvements	\$104,220	\$270,765
	MICHIGAN ISLAND - Old Michigan Island Lighthouse	\$280,867	\$729,698
	MICHIGAN ISLAND - Second Tower	\$54,524	\$141,655
	MICHIGAN ISLAND - Keepers Quarters	\$226,232	\$587,754
	MICHIGAN ISLAND - Assistant Keepers Quarters & Workshop	\$83,016	\$215,678
	MICHIGAN ISLAND - Power House	\$96,428	\$250,521
	MICHIGAN ISLAND - Shed	\$42,652	\$110,811
	MICHIGAN ISLAND - Privy	\$6,183	\$16,064
	TOTAL (Michigan Island)	\$894,124	\$2,322,946

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MICHIGAN ISLAND - Site Improvements

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	SITE IMPROVEMENTS - Cost Per Consultant					
	Site Clearing, 4 Acres	1	LS	\$28,200	\$28,200	\$73,264
	Site Circulation / Accessibility	1	LS	\$36,245	\$36,245	\$94,165
	Site Structures	1	LS	\$7,500	\$7,500	\$19,485
	Small Scale Site Features	1	LS	\$3,000	\$3,000	\$7,794
	Station Vegetation	1	LS	\$29,275	\$29,275	\$76,057
					\$104,220	\$270,765
	Subtotal Direct Construction Costs				\$104,220	\$270,765
	Published Location Factor (Negative 5.3 Percent)				-\$5,524	
	Remoteness Factor (20 Percent)				\$20,844	
	Federal Wage Rate Factor (7.5 Percent)				\$3,908	
	Design Contingency (20 Percent)				\$20,844	
	Total Direct Construction Costs				\$144,293	
	Standard General Conditions (14 Percent)				\$20,201	
	Government General Conditions (8 Percent)				\$11,543	
	Bond (2 Percent)				\$2,886	
	Historic Preservation Factor (15 Percent)				\$21,644	
	Subtotal NET Construction Cost				\$200,567	
	Overhead (10 Percent)				\$20,057	
	Profit (10 Percent)				\$20,057	
	Estimated NET Construction Cost				\$240,680	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$12,034	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$18,051	
	Total Estimated NET Cost of Construction				\$270,765	

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MICHIGAN ISLAND - Old Michigan Island Lighthouse

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$90,043	\$90,043	\$233,933
	Remove Roofing, Shingles	1,459	SF	\$3.21	\$4,683	\$12,168
	Remove Finishes - Floor, Wall & Ceiling	2,154	SF	\$2.68	\$5,773	\$14,998
					\$100,499	\$261,098
	ARCHITECTURAL					
	Exterior Wall - Repair Plaster, Repoint Masonry	3,389	SF	\$7.49	\$25,384	\$65,947
	Exterior Wall, Coat Masonry	3,389	SF	\$2.14	\$7,252	\$18,842
	Exterior Wall, Remove & Replace Wood Shingles	8	SF	\$26.75	\$214	\$556
	Modify Wall - Enlarge Door Opening	1	EA	\$1,873	\$1,873	\$4,865
	Exterior Stairs	11	SF	\$64.20	\$706	\$1,835
	Millwork, Refinish Existing	15	LF	\$160.50	\$2,408	\$6,255
	Handrails	86	LF	\$96.30	\$8,282	\$21,516
	Security Gate	1	EA	\$1,391	\$1,391	\$3,614
	Roofing, Asphalt Shingles, Felt & Flashings	1,459	SF	\$6.96	\$10,155	\$26,382
	Raingutter & Downspouts	120	LF	\$48.15	\$5,778	\$15,011
	Windows, New Glazing	55	SF	\$58.85	\$3,237	\$8,409
	Windows, Reinstall Glazing	164	SF	\$19.26	\$3,159	\$8,206
	Windows, Paint Frame & Sash	219	SF	\$23.54	\$5,155	\$13,393
	Door, Refinish & Replace Hardware - Existing	15	LEAF	\$749.00	\$11,235	\$29,189
	Wood Flooring, Refinish Original	3,628	SF	\$5.35	\$19,410	\$50,427
	Paint, Tower Roof & Trim	50	SF	\$6.42	\$321	\$834
	Paint & Repair Plaster, Interior Wall & Ceiling	5,106	SF	\$4.28	\$21,854	\$56,776
	Paint, Miscellaneous Items	1	LS	\$2,000	\$2,000	\$5,196
					\$129,812	\$337,253
	STRUCTURAL					
	Floor Structure, Reinforce Existing	62	SF	\$37.45	\$2,322	\$6,032
	Roof Structure, Reinforce Existing	55	SF	\$32.10	\$1,766	\$4,587
					\$4,087	\$10,619

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MICHIGAN ISLAND - Old Michigan Island Lighthouse

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	Remove Plumbing Fixtures & Piping	2	EA	\$802.50	\$1,605	\$4,170
	Remove Boiler & Piping	1	EA	\$2,675	\$2,675	\$6,950
	Remove Radiators	2	EA	\$642.00	\$1,284	\$3,336
	HVAC, Increase Ventilation	2,154	SF	\$9.10	\$19,601	\$50,925
					\$25,165	\$65,380
	ELECTRICAL					
	Remove Light Fixtures	10	EA	\$69.55	\$696	\$1,807
	Remove Receptacles	10	EA	\$53.50	\$535	\$1,390
	Replace Lightning Protection System	1,459	SF	\$4.28	\$6,245	\$16,223
	Photovoltaic System (Ventilation)	2,154	SF	\$6.42	\$13,829	\$35,927
					\$21,304	\$55,347
	Subtotal Direct Construction Costs				\$280,867	\$729,698
	Published Location Factor (Negative 5.3 Percent)				-\$14,886	
	Remoteness Factor (20 Percent)				\$56,173	
	Federal Wage Rate Factor (7.5 Percent)				\$10,533	
	Design Contingency (20 Percent)				\$56,173	
	Total Direct Construction Costs				\$388,861	
	Standard General Conditions (14 Percent)				\$54,441	
	Government General Conditions (8 Percent)				\$31,109	
	Bond (2 Percent)				\$7,777	
	Historic Preservation Factor (15 Percent)				\$58,329	
	Subtotal NET Construction Cost				\$540,517	
	Overhead (10 Percent)				\$54,052	
	Profit (10 Percent)				\$54,052	
	Estimated NET Construction Cost				\$648,620	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$32,431	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$48,647	
	Total Estimated NET Cost of Construction				\$729,698	

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MICHIGAN ISLAND - Second Tower

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$32,235	\$32,235	\$83,747
	Remove Exterior Window	10	SF	\$8.56	\$86	\$222
					\$32,321	\$83,969
	ARCHITECTURAL					
	Security Gate	1	EA	\$1,391	\$1,391	\$3,614
	Roofing, Repair Existing	280	SF	\$7.49	\$2,097	\$5,449
	Replace / Repair Vent Caps (Brass)	8	EA	\$214.00	\$1,712	\$4,448
	Windows, New Glazing	10	SF	\$58.85	\$589	\$1,529
	Windows, Paint Frame & Sash	72	SF	\$23.54	\$1,695	\$4,403
	Door, Refinish & Replace Hardware - Existing	1	LEAF	\$749.00	\$749	\$1,946
	Paint & Repair Plaster, Interior Wall & Ceiling	927	SF	\$4.28	\$3,968	\$10,308
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,299
					\$12,700	\$32,995
	STRUCTURAL					
	Column Bases, Repair Existing	2	EA	\$3,210	\$6,420	\$16,679
					\$6,420	\$16,679

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MICHIGAN ISLAND - Second Tower

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	HVAC, Increase Ventilation - Passive	262	SF	\$5.35	\$1,402	\$3,642
					\$1,402	\$3,642
	ELECTRICAL					
	Inspect / Replace Lightning Protection System	262	SF	\$6.42	\$1,682	\$4,370
					\$1,682	\$4,370
	Subtotal Direct Construction Costs				\$54,524	\$141,655
	Published Location Factor (Negative 5.3 Percent)				-\$2,890	
	Remoteness Factor (20 Percent)				\$10,905	
	Federal Wage Rate Factor (7.5 Percent)				\$2,045	
	Design Contingency (20 Percent)				\$10,905	
	Total Direct Construction Costs				\$75,489	
	Standard General Conditions (14 Percent)				\$10,568	
	Government General Conditions (8 Percent)				\$6,039	
	Bond (2 Percent)				\$1,510	
	Historic Preservation Factor (15 Percent)				\$11,323	
	Subtotal NET Construction Cost				\$104,930	
	Overhead (10 Percent)				\$10,493	
	Profit (10 Percent)				\$10,493	
	Estimated NET Construction Cost				\$125,916	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$6,296	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$9,444	
	Total Estimated NET Cost of Construction				\$141,655	

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MICHIGAN ISLAND - Keepers Quarters

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$47,756	\$47,756	\$124,071
	Remove Roofing, Shingles	1,105	SF	\$3.21	\$3,547	\$9,215
	Remove Finishes - Floor, Wall & Ceiling	1,932	SF	\$2.68	\$5,178	\$13,452
					\$56,481	\$146,738
	ARCHITECTURAL					
	Wood Porch, Repaint	126	SF	\$10.70	\$1,348	\$3,503
	Exterior Wall - Clean Brick	2,180	SF	\$2.14	\$4,665	\$12,120
	Exterior Wall - Repair Brick	65	SF	\$21.40	\$1,391	\$3,614
	Handrails	70	LF	\$96.30	\$6,741	\$17,513
	Roofing, Asphalt Shingles, Felt & Flashings	1,105	SF	\$6.96	\$7,691	\$19,981
	Replace Raingutters & Downspouts	130	LF	\$48.15	\$6,260	\$16,262
	Windows, New Glazing	20	SF	\$58.85	\$1,177	\$3,058
	Windows, Paint Frame & Sash	200	SF	\$23.54	\$4,708	\$12,231
	Door, Refinish & Replace Hardware - Existing	20	LEAF	\$749.00	\$14,980	\$38,918
	Wood Flooring, Refinish Original	1,782	SF	\$5.35	\$9,534	\$24,769
	Paint, Exterior Siding & Trim	200	SF	\$2.68	\$536	\$1,393
	Paint, Soffit & Trim	441	SF	\$3.75	\$1,654	\$4,296
	Paint & Repair Plaster, Interior Wall & Ceiling	4,667	SF	\$4.28	\$19,975	\$51,895
	Paint, Miscellaneous Items	1	LS	\$2,000	\$2,000	\$5,196
	ADA Lift, Allowance	1	LS	\$8,500	\$8,500	\$22,083
					\$91,159	\$236,832
	STRUCTURAL					
	Concrete Slab Infill (Replace)	30	SF	\$26.75	\$803	\$2,085
	Concrete Ramp & Railings	80	SF	\$117.70	\$9,416	\$24,463
	Floor Structure, Reinforce Existing	56	SF	\$37.45	\$2,097	\$5,449
	Roof Structure, Reinforce Existing	921	SF	\$12.84	\$11,826	\$30,723
					\$24,141	\$62,720

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MICHIGAN ISLAND - Keepers Quarters

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	Inspect / Repair Septic System	1	LS	\$15,000	\$15,000	\$38,970
	Remove Propane Piping	100	LF	\$10.70	\$1,070	\$2,780
	HVAC, Propane Piping	75	LF	\$28.89	\$2,167	\$5,629
	HVAC, Increase Ventilation	1,932	SF	\$9.10	\$17,581	\$45,676
					\$35,818	\$93,056
	ELECTRICAL					
	Replace Lightning Protection System	1,105	SF	\$4.28	\$4,729	\$12,287
	Photovoltaic System (Ventilation)	1,932	SF	\$6.42	\$12,403	\$32,224
	Replace Smoke Detectors	1	LS	\$1,500	\$1,500	\$3,897
					\$18,633	\$48,408
	Subtotal Direct Construction Costs				\$226,232	\$587,754
	Published Location Factor (Negative 5.3 Percent)				-\$11,990	
	Remoteness Factor (20 Percent)				\$45,246	
	Federal Wage Rate Factor (7.5 Percent)				\$8,484	
	Design Contingency (20 Percent)				\$45,246	
	Total Direct Construction Costs				\$313,218	
	Standard General Conditions (14 Percent)				\$43,851	
	Government General Conditions (8 Percent)				\$25,057	
	Bond (2 Percent)				\$6,264	
	Historic Preservation Factor (15 Percent)				\$46,983	
	Subtotal NET Construction Cost				\$435,373	
	Overhead (10 Percent)				\$43,537	
	Profit (10 Percent)				\$43,537	
	Estimated NET Construction Cost				\$522,448	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$26,122	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$39,184	
	Total Estimated NET Cost of Construction				\$587,754	

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MICHIGAN ISLAND - Assistant Keepers Quarters & Workshop

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$30,052	\$30,052	\$78,076
	Remove Roofing, Shingles	714	SF	\$3.21	\$2,292	\$5,954
					\$32,344	\$84,030
	ARCHITECTURAL					
	Handrails	25	LF	\$96.30	\$2,408	\$6,255
	Roofing, Asphalt Shingles, Felt & Flashings	714	SF	\$6.96	\$4,969	\$12,911
	Rain gutters, Downspouts & Splashblocks	54	LF	\$48.15	\$2,600	\$6,755
	Windows, New Glazing & Screens	50	SF	\$58.85	\$2,943	\$7,645
	Windows, Paint Frame & Sash	98	SF	\$23.54	\$2,307	\$5,993
	Door, Refinish & Replace Hardware - Existing	10	LEAF	\$749.00	\$7,490	\$19,459
	Wood Flooring, Refinish Existing	364	SF	\$5.35	\$1,947	\$5,059
	Paint, Exterior Siding & Trim	1,134	SF	\$2.68	\$3,039	\$7,896
	Paint, Soffit & Trim	415	SF	\$3.75	\$1,556	\$4,043
	Paint & Repair Plaster, Interior Wall & Ceiling	778	SF	\$4.28	\$3,330	\$8,651
	Paint, Miscellaneous Items	1	LS	\$1,000	\$1,000	\$2,598
					\$33,589	\$87,265
	STRUCTURAL					
	Roof Structure, Reinforce Existing	34	SF	\$32.10	\$1,091	\$2,835
					\$1,091	\$2,835

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MICHIGAN ISLAND - Assistant Keepers Quarters & Workshop

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	Cap Unused Piping	1	LS	\$1,000	\$1,000	\$2,598
	HVAC, Increase Ventilation	778	SF	\$9.10	\$7,080	\$18,393
					\$8,080	\$20,991
	ELECTRICAL					
	Replace Feeder Circuitry	778	SF	\$3.75	\$2,918	\$7,580
	Photovoltaic System (Ventilation)	778	SF	\$6.42	\$4,995	\$12,976
					\$7,912	\$20,556
	Subtotal Direct Construction Costs				\$83,016	\$215,678
	Published Location Factor (Negative 5.3 Percent)				-\$4,400	
	Remoteness Factor (20 Percent)				\$16,603	
	Federal Wage Rate Factor (7.5 Percent)				\$3,113	
	Design Contingency (20 Percent)				\$16,603	
	Total Direct Construction Costs				\$114,936	
	Standard General Conditions (14 Percent)				\$16,091	
	Government General Conditions (8 Percent)				\$9,195	
	Bond (2 Percent)				\$2,299	
	Historic Preservation Factor (15 Percent)				\$17,240	
	Subtotal NET Construction Cost				\$159,761	
	Overhead (10 Percent)				\$15,976	
	Profit (10 Percent)				\$15,976	
	Estimated NET Construction Cost				\$191,714	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$9,586	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$14,379	
	Total Estimated NET Cost of Construction				\$215,678	

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MICHIGAN ISLAND - Power House

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$21,704	\$21,704	\$56,387
	Remove Roofing, Shingles	779	SF	\$3.21	\$2,501	\$6,497
					\$24,205	\$62,884
	ARCHITECTURAL					
	Exterior Wall - Repair Brick	175	SF	\$21.40	\$3,745	\$9,730
	Repair Stairs & Add Railings	1	LS	\$3,500	\$3,500	\$9,093
	Roofing, Asphalt Shingles, Felt & Flashings	779	SF	\$6.96	\$5,422	\$14,086
	Raingutter, Downspouts & Splashblocks	88	LF	\$48.15	\$4,237	\$11,008
	Windows, New Glazing	40	SF	\$58.85	\$2,354	\$6,116
	Windows, Paint Frame, Sash & Repair Hardware	40	SF	\$23.54	\$942	\$2,446
	Door, Refinish & Replace Hardware - Existing	5	LEAF	\$749.00	\$3,745	\$9,730
	Paint, Soffit & Trim	56	SF	\$3.75	\$210	\$546
	Paint & Repair Plaster, Interior Wall & Ceiling	1,300	SF	\$4.28	\$5,564	\$14,455
	Paint, Miscellaneous Items	1	LS	\$1,000	\$1,000	\$2,598
					\$30,719	\$79,807
	STRUCTURAL					
	Roof Structure, Repair Existing	110	SF	\$32.10	\$3,531	\$9,174
					\$3,531	\$9,174

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MICHIGAN ISLAND - Power House

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	Tram Hoist, Replace w/ Diesel Powered Unit	1	LS	\$16,200	\$16,200	\$42,088
	HVAC, Increase Ventilation	832	SF	\$9.10	\$7,571	\$19,670
					\$23,771	\$61,758
	ELECTRICAL					
	Diesel Generator, Remove	1	EA	\$3,210	\$3,210	\$8,340
	Replace Branch Circuitry	832	SF	\$5.35	\$4,451	\$11,564
	Photovoltaic System (Ventilation)	832	SF	\$6.42	\$5,341	\$13,877
	Overcurrent Protection	1	LS	\$1,200	\$1,200	\$3,118
					\$14,203	\$36,899
	Subtotal Direct Construction Costs				\$96,428	\$250,521
	Published Location Factor (Negative 5.3 Percent)				-\$5,111	
	Remoteness Factor (20 Percent)				\$19,286	
	Federal Wage Rate Factor (7.5 Percent)				\$3,616	
	Design Contingency (20 Percent)				\$19,286	
	Total Direct Construction Costs				\$133,505	
	Standard General Conditions (14 Percent)				\$18,691	
	Government General Conditions (8 Percent)				\$10,680	
	Bond (2 Percent)				\$2,670	
	Historic Preservation Factor (15 Percent)				\$20,026	
	Subtotal NET Construction Cost				\$185,571	
	Overhead (10 Percent)				\$18,557	
	Profit (10 Percent)				\$18,557	
	Estimated NET Construction Cost				\$222,686	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$11,134	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$16,701	
	Total Estimated NET Cost of Construction				\$250,521	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

MICHIGAN ISLAND - Shed

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$3,000	\$3,000	\$7,794
	Remove Roof & Structure	444	SF	\$7.49	\$3,326	\$8,640
					\$6,326	\$16,434
	ARCHITECTURAL					
	Remove Plywood Flooring & Replace Wood Flooring	135	SF	\$12.84	\$1,733	\$4,503
	Exterior Wall, Wood Studs	599	SF	\$4.82	\$2,887	\$7,501
	Wood Roof Shingles & Flashings	444	SF	\$8.56	\$3,801	\$9,874
	Windows, New Glazing	25	SF	\$58.85	\$1,471	\$3,822
	Windows, Paint Frame & Sash	25	SF	\$23.54	\$589	\$1,529
	Doors, Refinish, Replace Hardware & Add Plexiglass Panel	2	LEAF	\$1,017	\$2,033	\$5,282
	Paint, Exterior Siding & Trim	599	SF	\$2.68	\$1,605	\$4,171
	Paint, Soffit & Trim	82	SF	\$3.75	\$308	\$799
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,299
					\$14,927	\$38,780
	STRUCTURAL					
	Concrete Foundations	10	CY	\$856.00	\$8,560	\$22,239
	Concrete Slab on Grade	240	SF	\$13.91	\$3,338	\$8,673
	Wood Roof Structure & Sheathing	444	SF	\$21.40	\$9,502	\$24,685
					\$21,400	\$55,598

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

MICHIGAN ISLAND - Shed						
Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL				Not Required	
	ELECTRICAL				Not Required	
	Subtotal Direct Construction Costs				\$42,652	\$110,811
	Published Location Factor (Negative 5.3 Percent)				-\$2,261	
	Remoteness Factor (20 Percent)				\$8,530	
	Federal Wage Rate Factor (7.5 Percent)				\$1,599	
	Design Contingency (20 Percent)				\$8,530	
	Total Direct Construction Costs				\$59,052	
	Standard General Conditions (14 Percent)				\$8,267	
	Government General Conditions (8 Percent)				\$4,724	
	Bond (2 Percent)				\$1,181	
	Historic Preservation Factor (15 Percent)				\$8,858	
	Subtotal NET Construction Cost				\$82,083	
	Overhead (10 Percent)				\$8,208	
	Profit (10 Percent)				\$8,208	
	Estimated NET Construction Cost				\$98,499	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$4,925	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$7,387	
	Total Estimated NET Cost of Construction				\$110,811	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

MICHIGAN ISLAND - Privy

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$1,739	\$1,739	\$4,518
					\$1,739	\$4,518
	ARCHITECTURAL					
	Metal Roofing, Repair Existing	15	SF	\$42.80	\$642	\$1,668
	Windows, Paint Frame & Sash	2	SF	\$47.08	\$94	\$245
	Wood Flooring, Repaint Existing	16	SF	\$5.35	\$86	\$222
	Paint, Exterior Siding & Trim	140	SF	\$5.35	\$749	\$1,946
	Paint, Roof & Trim	59	SF	\$6.42	\$379	\$984
	Paint, Interior Wall & Ceiling	166	SF	\$4.28	\$710	\$1,846
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,299
					\$3,160	\$8,210
	STRUCTURAL					
	Concrete Foundations	1	CY	\$1,284	\$1,284	\$3,336
					\$1,284	\$3,336

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

MICHIGAN ISLAND - Privy						
Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL				Not Required	
	ELECTRICAL				Not Required	
	Subtotal Direct Construction Costs				\$6,183	\$16,064
	Published Location Factor (Negative 5.3 Percent)				-\$328	
	Remoteness Factor (20 Percent)				\$1,237	
	Federal Wage Rate Factor (7.5 Percent)				\$232	
	Design Contingency (20 Percent)				\$1,237	
	Total Direct Construction Costs				\$8,560	
	Standard General Conditions (14 Percent)				\$1,198	
	Government General Conditions (8 Percent)				\$685	
	Bond (2 Percent)				\$171	
	Historic Preservation Factor (15 Percent)				\$1,284	
	Subtotal NET Construction Cost				\$11,899	
	Overhead (10 Percent)				\$1,190	
	Profit (10 Percent)				\$1,190	
	Estimated NET Construction Cost				\$14,279	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$714	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$1,071	
	Total Estimated NET Cost of Construction				\$16,064	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Reviewed By: Parametrix, Inc.
Date: March 4, 2011

SUMMARY - OUTER ISLAND

Item	Description		Direct Cost	Total Net
	OUTER ISLAND - Site Improvements		\$46,608	\$125,460
	OUTER ISLAND - Outer Island Tower		\$56,774	\$152,827
	OUTER ISLAND - Keepers Quarters		\$232,789	\$626,631
	OUTER ISLAND - Fog Signal Building		\$99,444	\$267,688
	OUTER ISLAND - Oil Storage		\$4,867	\$13,100
	OUTER ISLAND - Privy		\$6,396	\$17,217
	TOTAL (Outer Island)		\$446,878	\$1,202,923

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

OUTER ISLAND - Site Improvements						
Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	SITE IMPROVEMENTS - Cost Per Consultant					
	Site Clearing, 2.5 Acres	1	LS	\$20,283	\$20,283	\$54,597
	Site Circulation / Accessibility	1	LS	\$17,450	\$17,450	\$46,973
	Site Structures	1	LS	\$2,750	\$2,750	\$7,403
	Small Scale Site Features	1	LS	\$4,500	\$4,500	\$12,113
	Landscape Plantings	1	LS	\$1,625	\$1,625	\$4,374
					\$46,608	\$125,460
	Subtotal Direct Construction Costs				\$46,608	\$125,460
	Published Location Factor (Negative 5.3 Percent)				-\$2,470	
	Remoteness Factor (25 Percent)				\$11,652	
	Federal Wage Rate Factor (7.5 Percent)				\$1,748	
	Design Contingency (20 Percent)				\$9,322	
	Total Direct Construction Costs				\$66,858	
	Standard General Conditions (14 Percent)				\$9,360	
	Government General Conditions (8 Percent)				\$5,349	
	Bond (2 Percent)				\$1,337	
	Historic Preservation Factor (15 Percent)				\$10,029	
	Subtotal NET Construction Cost				\$92,933	
	Overhead (10 Percent)				\$9,293	
	Profit (10 Percent)				\$9,293	
	Estimated NET Construction Cost				\$111,520	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$5,576	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$8,364	
	Total Estimated NET Cost of Construction				\$125,460	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

OUTER ISLAND - Outer Island Tower

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$13,201	\$13,201	\$35,535
	Remove Finishes - Floor, Wall & Ceiling	95	SF	\$5.35	\$508	\$1,368
					\$13,709	\$36,903
	ARCHITECTURAL					
	Exterior Wall - Repoint / Seal Masonry	3,192	SF	\$7.49	\$23,908	\$64,357
	Handrails	17	LF	\$96.30	\$1,637	\$4,407
	Windows, New Glazing & 1 Storm Window to Match Existing	3	SF	\$117.70	\$353	\$950
	Door, Refinish & Replace Hardware - Existing	1	LEAF	\$749.00	\$749	\$2,016
	Flooring, Repair Existing	277	SF	\$3.21	\$889	\$2,394
	Ceiling, Repair Existing	201	SF	\$3.75	\$754	\$2,029
	Patch Roof Rust	65	SF	\$4.28	\$278	\$749
	Paint, Roof & Trim	65	SF	\$12.84	\$835	\$2,247
	Paint, Interior Wall & Ceiling	3,138	SF	\$1.61	\$5,052	\$13,600
	Paint, Stairs	4	FLT	\$1,070	\$4,280	\$11,521
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,346
					\$39,235	\$105,615
	STRUCTURAL					
	Monitor Existing Cracks	1	LS	\$2,000	\$2,000	\$5,384
					\$2,000	\$5,384

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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OUTER ISLAND - Outer Island Tower

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	HVAC, Increase Ventilation - Passive	95	SF	\$10.70	\$1,017	\$2,736
					\$1,017	\$2,736
	ELECTRICAL					
	Inspect / Replace Lightning Protection System	95	SF	\$8.56	\$813	\$2,189
					\$813	\$2,189
	Subtotal Direct Construction Costs				\$56,774	\$152,827
	Published Location Factor (Negative 5.3 Percent)				-\$3,009	
	Remoteness Factor (25 Percent)				\$14,194	
	Federal Wage Rate Factor (7.5 Percent)				\$2,129	
	Design Contingency (20 Percent)				\$11,355	
	Total Direct Construction Costs				\$81,442	
	Standard General Conditions (14 Percent)				\$11,402	
	Government General Conditions (8 Percent)				\$6,515	
	Bond (2 Percent)				\$1,629	
	Historic Preservation Factor (15 Percent)				\$12,216	
	Subtotal NET Construction Cost				\$113,205	
	Overhead (10 Percent)				\$11,321	
	Profit (10 Percent)				\$11,321	
	Estimated NET Construction Cost				\$135,846	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$6,792	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$10,188	
	Total Estimated NET Cost of Construction				\$152,827	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate By: Parametrix, Inc.
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Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

OUTER ISLAND - Keepers Quarters

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$88,868	\$88,868	\$239,218
	Remove Finishes - Floor, Wall & Ceiling	2,494	SF	\$2.68	\$6,684	\$17,992
					\$95,552	\$257,210
	ARCHITECTURAL					
	Metal Roofing, Repair Existing	655	SF	\$8.56	\$5,607	\$15,093
	Chimney Liner	37	LF	\$107.00	\$3,959	\$10,657
	Exterior Wall - Repoint / Seal Masonry & Replace 1 Window Sill	2,204	SF	\$7.49	\$16,508	\$44,437
	Handrails	40	LF	\$96.30	\$3,852	\$10,369
	Millwork, Refinish Existing	12	LF	\$160.50	\$1,926	\$5,184
	Windows, Paint Frame & Sash & Replace Glazing Putty	216	SF	\$23.54	\$5,085	\$13,687
	Repair Secondary Entry	1	LS	\$2,500	\$2,500	\$6,730
	Wood Flooring, Refinish Original	1,779	SF	\$5.35	\$9,518	\$25,620
	Paint, Roof & Trim	243	SF	\$3.75	\$911	\$2,453
	Paint, Soffit & Trim	339	SF	\$3.75	\$1,271	\$3,422
	Paint, Exterior Siding & Trim	224	SF	\$2.68	\$600	\$1,616
	Paint & Repair Plaster, Interior Wall & Ceiling	4,780	SF	\$4.28	\$20,458	\$55,071
	Paint & Repair Stairs	1	FLT	\$1,338	\$1,338	\$3,600
	Paint, Miscellaneous Items	1	LS	\$2,000	\$2,000	\$5,384
					\$75,533	\$203,322
	STRUCTURAL				Not Required	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate is Based on 2011 Costs

OUTER ISLAND - Keepers Quarters

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	Remove Unused Propane Piping	25	LF	\$10.70	\$268	\$720
	Inspect / Repair Septic System	1	LS	\$15,000	\$15,000	\$40,378
	HVAC, Increase Ventilation	2,494	SF	\$9.10	\$22,695	\$61,092
					\$37,963	\$102,190
	ELECTRICAL					
	Replace Lightning Protection System	1,222	SF	\$4.28	\$5,230	\$14,079
	Photovoltaic System (Ventilation)	2,494	SF	\$6.42	\$16,011	\$43,100
	Overcurrent Protection	1	LS	\$2,500	\$2,500	\$6,730
					\$23,742	\$63,909
	Subtotal Direct Construction Costs				\$232,789	\$626,631
	Published Location Factor (Negative 5.3 Percent)				-\$12,338	
	Remoteness Factor (25 Percent)				\$58,197	
	Federal Wage Rate Factor (7.5 Percent)				\$8,730	
	Design Contingency (20 Percent)				\$46,558	
	Total Direct Construction Costs				\$333,936	
	Standard General Conditions (14 Percent)				\$46,751	
	Government General Conditions (8 Percent)				\$26,715	
	Bond (2 Percent)				\$6,679	
	Historic Preservation Factor (15 Percent)				\$50,090	
	Subtotal NET Construction Cost				\$464,171	
	Overhead (10 Percent)				\$46,417	
	Profit (10 Percent)				\$46,417	
	Estimated NET Construction Cost				\$557,005	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$27,850	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$41,775	
	Total Estimated NET Cost of Construction				\$626,631	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate By: Parametrix, Inc.
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Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

OUTER ISLAND - Fog Signal Building

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$39,294	\$39,294	\$105,773
	Remove Finishes - Floor, Wall & Ceiling	1,024	SF	\$2.68	\$2,744	\$7,387
					\$42,038	\$113,160
	ARCHITECTURAL					
	Handrails	20	LF	\$96.30	\$1,926	\$5,184
	Exterior Wall - Replace Chipped Shingles	250	SF	\$10.70	\$2,675	\$7,201
	Windows, Paint Frame, Sash & Replace Hardware	96	SF	\$23.54	\$2,260	\$6,083
	Door, Refinish & Replace Hardware - Existing	13	LEAF	\$749.00	\$9,737	\$26,210
	Wood Flooring, Refinish Existing	81	SF	\$10.70	\$867	\$2,333
	Ceiling, Repair Existing	1,024	SF	\$2.68	\$2,744	\$7,387
	Paint, Interior Wall & Ceiling	2,190	SF	\$1.61	\$3,526	\$9,491
	Paint, Soffit & Trim	333	SF	\$3.75	\$1,249	\$3,361
	Paint, Stairs	1	FLT	\$1,070	\$1,070	\$2,880
	Paint, Miscellaneous Items	1	LS	\$1,000	\$1,000	\$2,692
					\$27,054	\$72,824
	STRUCTURAL					
	Ceiling Framing, Reinforce Existing	210	SF	\$12.84	\$2,696	\$7,258
					\$2,696	\$7,258
	MECHANICAL					
	Remove Piping	25	LF	\$10.70	\$268	\$720
	Tram Hoist, Replace w/ Diesel Powered Unit	1	LS	\$16,200	\$16,200	\$43,608
					\$16,468	\$44,328

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

Estimate By: Parametrix, Inc.
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Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

OUTER ISLAND - Fog Signal Building

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	ELECTRICAL					
	Diesel Generator, Remove	1	EA	\$3,210	\$3,210	\$8,641
	Replace Branch Circuitry	1,024	SF	\$5.35	\$5,478	\$14,747
	Overcurrent Protection	1	LS	\$2,500	\$2,500	\$6,730
					\$11,188	\$30,117
	Subtotal Direct Construction Costs				\$99,444	\$267,688
	Published Location Factor (Negative 5.3 Percent)				-\$5,271	
	Remoteness Factor (25 Percent)				\$24,861	
	Federal Wage Rate Factor (7.5 Percent)				\$3,729	
	Design Contingency (20 Percent)				\$19,889	
	Total Direct Construction Costs				\$142,653	
	Standard General Conditions (14 Percent)				\$19,971	
	Government General Conditions (8 Percent)				\$11,412	
	Bond (2 Percent)				\$2,853	
	Historic Preservation Factor (15 Percent)				\$21,398	
	Subtotal NET Construction Cost				\$198,287	
	Overhead (10 Percent)				\$19,829	
	Profit (10 Percent)				\$19,829	
	Estimated NET Construction Cost				\$237,945	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$11,897	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$17,846	
	Total Estimated NET Cost of Construction				\$267,688	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

OUTER ISLAND - Oil Storage

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$1,000	\$1,000	\$2,692
					\$1,000	\$2,692
	ARCHITECTURAL					
	Exterior Wall - Repair, Repoint & Seal Brick	261	SF	\$10.70	\$2,793	\$7,517
	Door, Repaint Existing	1	LEAF	\$90.95	\$91	\$245
	Paint, Floor & Interior Wall	300	SF	\$1.61	\$483	\$1,300
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,346
					\$3,867	\$10,408
	STRUCTURAL				Not Required	
	MECHANICAL				Not Required	
	ELECTRICAL				Not Required	
	Subtotal Direct Construction Costs				\$4,867	\$13,100
	Published Location Factor (Negative 5.3 Percent)				-\$258	
	Remoteness Factor (25 Percent)				\$1,217	
	Federal Wage Rate Factor (7.5 Percent)				\$182	
	Design Contingency (20 Percent)				\$973	
	Total Direct Construction Costs				\$6,981	
	Standard General Conditions (14 Percent)				\$977	
	Government General Conditions (8 Percent)				\$558	
	Bond (2 Percent)				\$140	
	Historic Preservation Factor (15 Percent)				\$1,047	
	Subtotal NET Construction Cost				\$9,704	
	Overhead (10 Percent)				\$970	
	Profit (10 Percent)				\$970	
	Estimated NET Construction Cost				\$11,645	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$582	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$873	
	Total Estimated NET Cost of Construction				\$13,100	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate By: Parametrix, Inc.
Date: March 4, 2011

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Reviewed By: Parametrix, Inc.
Date: March 4, 2011

OUTER ISLAND - Privy

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$1,355	\$1,355	\$3,647
					\$1,355	\$3,647
	ARCHITECTURAL					
	Exterior Wall - Repair, Repoint & Seal Brick	132	SF	\$10.70	\$1,412	\$3,802
	Millwork, Refinish Existing	5	LF	\$267.50	\$1,338	\$3,600
	Metal Roofing, Repair & Repaint Existing	56	SF	\$7.49	\$419	\$1,129
	Windows, Paint Frame & Sash	3	SF	\$47.08	\$141	\$380
	Wood Roof Vent, Epoxy Stabilize	1	EA	\$267.50	\$268	\$720
	Door, Refinish Existing	1	LEAF	\$240.75	\$241	\$648
	Paint, Exterior Trim	135	SF	\$5.35	\$722	\$1,944
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,346
					\$5,041	\$13,570
	STRUCTURAL				Not Required	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

OUTER ISLAND - Privy						
Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL				Not Required	
	ELECTRICAL				Not Required	
	Subtotal Direct Construction Costs				\$6,396	\$17,217
	Published Location Factor (Negative 5.3 Percent)				-\$339	
	Remoteness Factor (25 Percent)				\$1,599	
	Federal Wage Rate Factor (7.5 Percent)				\$240	
	Design Contingency (20 Percent)				\$1,279	
	Total Direct Construction Costs				\$9,175	
	Standard General Conditions (14 Percent)				\$1,285	
	Government General Conditions (8 Percent)				\$734	
	Bond (2 Percent)				\$184	
	Historic Preservation Factor (15 Percent)				\$1,376	
	Subtotal NET Construction Cost				\$12,753	
	Overhead (10 Percent)				\$1,275	
	Profit (10 Percent)				\$1,275	
	Estimated NET Construction Cost				\$15,304	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$765	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$1,148	
	Total Estimated NET Cost of Construction				\$17,217	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
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Reviewed By: Parametrix, Inc.
Date: March 4, 2011

SUMMARY - DEVILS ISLAND

Item	Description		Direct Cost	Total Net
	DEVILS ISLAND - Site Improvements		\$121,598	\$315,912
	DEVILS ISLAND - Devils Island Light Station Tower		\$100,383	\$260,797
	DEVILS ISLAND - Keepers Quarters		\$222,364	\$577,704
	DEVILS ISLAND - Assistant Keepers Quarters		\$158,208	\$411,026
	DEVILS ISLAND - Fog Signal Building		\$90,317	\$234,646
	DEVILS ISLAND - Oil House #1		\$3,520	\$9,145
	DEVILS ISLAND - Oil House #2		\$6,513	\$16,922
	DEVILS ISLAND - Tramway Engine Building		\$9,603	\$24,948
	DEVILS ISLAND - Boathouse		\$37,526	\$97,494
	TOTAL (Devil's Island)		\$750,032	\$1,948,594

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

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DEVILS ISLAND - Site Improvements

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	SITE IMPROVEMENTS - Cost Per Consultant					
	Site Clearing, 8.7 Acres	1	LS	\$22,410	\$22,410	\$58,221
	Site Circulation / Accessibility	1	LS	\$49,063	\$49,063	\$127,465
	Site Structures	1	LS	\$36,000	\$36,000	\$93,529
	Small Scale Site Features	1	LS	\$13,875	\$13,875	\$36,047
	Landscape Plantings	1	LS	\$250.00	\$250	\$650
					\$121,598	\$315,912
	Subtotal Direct Construction Costs				\$121,598	\$315,912
	Published Location Factor (Negative 5.3 Percent)				-\$6,445	
	Remoteness Factor (20 Percent)				\$24,320	
	Federal Wage Rate Factor (7.5 Percent)				\$4,560	
	Design Contingency (20 Percent)				\$24,320	
	Total Direct Construction Costs				\$168,352	
	Standard General Conditions (14 Percent)				\$23,569	
	Government General Conditions (8 Percent)				\$13,468	
	Bond (2 Percent)				\$3,367	
	Historic Preservation Factor (15 Percent)				\$25,253	
	Subtotal NET Construction Cost				\$234,009	
	Overhead (10 Percent)				\$23,401	
	Profit (10 Percent)				\$23,401	
	Estimated NET Construction Cost				\$280,811	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$14,041	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$21,061	
	Total Estimated NET Cost of Construction				\$315,912	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate By: Parametrix, Inc.
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Date: March 4, 2011

Estimate is Based on 2011 Costs

DEVILS ISLAND - Devils Island Light Station Tower

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$47,500	\$47,500	\$123,406
					\$47,500	\$123,406
	ARCHITECTURAL					
	Handrails	42	LF	\$96.30	\$4,045	\$10,508
	Windows, Restore Operation - Export / Import to Site	150	SF	\$64.20	\$9,630	\$25,019
	Windows, Paint Frame & Sash	153	SF	\$23.54	\$3,602	\$9,357
	Door, Repaint & Replace Hardware - Existing	4	LEAF	\$749.00	\$2,996	\$7,784
	Paint, Exterior Siding & Trim	1,794	SF	\$2.68	\$4,808	\$12,491
	Patch Roof Rust	94	SF	\$4.28	\$402	\$1,045
	Paint, Roof & Trim	94	SF	\$12.84	\$1,207	\$3,136
	Paint, Interior Wall & Ceiling	226	SF	\$1.61	\$364	\$945
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,299
					\$27,553	\$71,584
	STRUCTURAL					
	Foundation, Repair Cracks	576	SF	\$21.40	\$12,326	\$32,024
	Additional Investigation, Allowance	1	LS	\$10,000	\$10,000	\$25,980
					\$22,326	\$58,004

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

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Estimate is Based on 2011 Costs

DEVILS ISLAND - Devils Island Light Station Tower

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	HVAC, Clean & Re-install Ball Ventilator	1	EA	\$856.00	\$856	\$2,224
	HVAC, Increase Ventilation - Passive	223	SF	\$5.35	\$1,193	\$3,100
					\$2,049	\$5,323
	ELECTRICAL					
	Inspect / Replace Lighting Protection System	223	SF	\$4.28	\$954	\$2,480
					\$954	\$2,480
	Subtotal Direct Construction Costs				\$100,383	\$260,797
	Published Location Factor (Negative 5.3 Percent)				-\$5,320	
	Remoteness Factor (20 Percent)				\$20,077	
	Federal Wage Rate Factor (7.5 Percent)				\$3,764	
	Design Contingency (20 Percent)				\$20,077	
	Total Direct Construction Costs				\$138,980	
	Standard General Conditions (14 Percent)				\$19,457	
	Government General Conditions (8 Percent)				\$11,118	
	Bond (2 Percent)				\$2,780	
	Historic Preservation Factor (15 Percent)				\$20,847	
	Subtotal NET Construction Cost				\$193,183	
	Overhead (10 Percent)				\$19,318	
	Profit (10 Percent)				\$19,318	
	Estimated NET Construction Cost				\$231,819	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$11,591	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$17,386	
	Total Estimated NET Cost of Construction				\$260,797	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

DEVILS ISLAND - Keepers Quarters

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$60,058	\$60,058	\$156,032
	Remove Floor Decking & Structure	66	SF	\$19.26	\$1,271	\$3,302
	Remove Roofing, Shingles	70	SF	\$6.42	\$449	\$1,168
	Remove Finishes - Floor, Wall & Ceiling	2,373	SF	\$2.68	\$6,360	\$16,522
					\$68,138	\$177,024
	ARCHITECTURAL					
	Handrails	30	LF	\$96.30	\$2,889	\$7,506
	Exterior Wall - Repoint / Seal Masonry	3,040	SF	\$7.49	\$22,770	\$59,156
	Roof Shingles, Wood	72	SF	\$17.12	\$1,233	\$3,202
	Windows, Paint Frame & Sash & Replace Glazing Putty	190	SF	\$23.54	\$4,473	\$11,620
	Door, Refinish Existing	14	LEAF	\$267.50	\$3,745	\$9,730
	Door Hatch, Replace / Stabilize Rotted Wood & Repaint	1	LS	\$750.00	\$750	\$1,949
	Flooring, Repair Existing	210	SF	\$3.21	\$674	\$1,751
	Paint, Porch	67	SF	\$10.70	\$717	\$1,863
	Paint, Soffit & Trim	452	SF	\$3.75	\$1,695	\$4,404
	Paint, Interior Wall & Ceiling	2,633	SF	\$1.61	\$4,239	\$11,013
	Paint, Stairs	1	FLT	\$1,070	\$1,070	\$2,780
	Paint, Miscellaneous Items	1	LS	\$2,000	\$2,000	\$5,196
					\$46,254	\$120,168
	STRUCTURAL					
	Wood Floor Decking & Structure	66	SF	\$53.50	\$3,531	\$9,174
	Floor Structure, Reinforce Existing	47	SF	\$37.45	\$1,760	\$4,573
					\$5,291	\$13,746

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate By: Parametrix, Inc.
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Date: March 4, 2011

Estimate is Based on 2011 Costs

DEVILS ISLAND - Keepers Quarters

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	Remove Unused Propane Piping	15	LF	\$21.40	\$321	\$834
	Inspect / Repair Septic System	1	LS	\$15,000	\$15,000	\$38,970
	Clean & Repair Radiators	12	EA	\$1,445	\$17,334	\$45,034
	HVAC, Increase Ventilation	2,373	SF	\$9.10	\$21,594	\$56,102
					\$54,249	\$140,940
	ELECTRICAL					
	Light Fixtures	15	EA	\$240.75	\$3,611	\$9,382
	Receptacles	20	EA	\$160.50	\$3,210	\$8,340
	Inspect / Replace Lightning Protection System	921	SF	\$4.28	\$3,942	\$10,241
	Replace Feeder / Branch Circuitry	2,373	SF	\$7.49	\$17,774	\$46,177
	Fire Alarm System, New Smoke / Carbon Monoxide Detectors	2,373	SF	\$0.91	\$2,159	\$5,610
	Photovoltaic System (Ventilation)	2,373	SF	\$6.42	\$15,235	\$39,580
	Overcurrent Protection	1	LS	\$2,500	\$2,500	\$6,495
					\$48,431	\$125,824
	Subtotal Direct Construction Costs				\$222,364	\$577,704
	Published Location Factor (Negative 5.3 Percent)				-\$11,785	
	Remoteness Factor (20 Percent)				\$44,473	
	Federal Wage Rate Factor (7.5 Percent)				\$8,339	
	Design Contingency (20 Percent)				\$44,473	
	Total Direct Construction Costs				\$307,862	
	Standard General Conditions (14 Percent)				\$43,101	
	Government General Conditions (8 Percent)				\$24,629	
	Bond (2 Percent)				\$6,157	
	Historic Preservation Factor (15 Percent)				\$46,179	
	Subtotal NET Construction Cost				\$427,929	
	Overhead (10 Percent)				\$42,793	
	Profit (10 Percent)				\$42,793	
	Estimated NET Construction Cost				\$513,515	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$25,676	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$38,514	
	Total Estimated NET Cost of Construction				\$577,704	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

Estimate By: Parametrix, Inc.
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Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

DEVILS ISLAND - Assistant Keepers Quarters

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$54,355	\$54,355	\$141,215
	Remove Finishes - Floor, Wall & Ceiling	2,153	SF	\$2.68	\$5,770	\$14,991
					\$60,125	\$156,206
	ARCHITECTURAL					
	Exterior Wall - Repoint Masonry	86	SF	\$14.98	\$1,288	\$3,347
	Wood Stairs, Porch - Replace Existing	5	RISER	\$240.75	\$1,204	\$3,127
	Handrails	40	LF	\$96.30	\$3,852	\$10,008
	Millwork, Refinish Existing	10	LF	\$160.50	\$1,605	\$4,170
	Windows, Paint Frame & Sash	198	SF	\$23.54	\$4,661	\$12,109
	Windows, Repair & Reglaze	50	SF	\$58.85	\$2,943	\$7,645
	Door, Refinish & Replace Hardware - Existing	15	LEAF	\$749.00	\$11,235	\$29,189
	Wood Flooring, Refinish Existing	1,225	SF	\$5.35	\$6,554	\$17,027
	Flooring, Repair Existing	217	SF	\$3.21	\$697	\$1,810
	Paint & Repair Plaster, Interior Wall & Ceiling	4,969	SF	\$4.28	\$21,267	\$55,253
	Paint, Porch	67	SF	\$10.70	\$717	\$1,863
	Paint, Soffit & Trim	341	SF	\$3.75	\$1,279	\$3,322
	Paint, Stairs	1	FLT	\$1,070	\$1,070	\$2,780
	Paint, Miscellaneous Items	1	LS	\$2,000	\$2,000	\$5,196
					\$60,371	\$156,844
	STRUCTURAL					
	Wood Floor Decking & Structure	81	SF	\$53.50	\$4,334	\$11,258
	Floor Structure, Reinforce Existing	54	SF	\$37.45	\$2,022	\$5,254
	Columns, Reinforce Existing	2	EA	\$1,605	\$3,210	\$8,340
					\$9,566	\$24,852

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

Estimate By: Parametrix, Inc.
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Date: March 4, 2011

Estimate is Based on 2011 Costs

DEVILS ISLAND - Assistant Keepers Quarters

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	Remove Plumbing Fixtures & Piping	2	EA	\$802.50	\$1,605	\$4,170
	Radiators, Clean Existing	9	EA	\$321.00	\$2,889	\$7,506
	HVAC, Increase Ventilation - Passive	2,153	SF	\$5.35	\$11,519	\$29,925
					\$16,013	\$41,601
	ELECTRICAL					
	Remove Light Fixtures	5	EA	\$48.15	\$241	\$625
	Remove Receptacles	10	EA	\$37.45	\$375	\$973
	Inspect / Replace Lightning Protection System	2,153	SF	\$4.28	\$9,215	\$23,940
	Remove Feeder / Branch Circuitry	2,153	SF	\$1.07	\$2,304	\$5,985
					\$12,134	\$31,524
	Subtotal Direct Construction Costs				\$158,208	\$411,026
	Published Location Factor (Negative 5.3 Percent)				-\$8,385	
	Remoteness Factor (20 Percent)				\$31,642	
	Federal Wage Rate Factor (7.5 Percent)				\$5,933	
	Design Contingency (20 Percent)				\$31,642	
	Total Direct Construction Costs				\$219,039	
	Standard General Conditions (14 Percent)				\$30,665	
	Government General Conditions (8 Percent)				\$17,523	
	Bond (2 Percent)				\$4,381	
	Historic Preservation Factor (15 Percent)				\$32,856	
	Subtotal NET Construction Cost				\$304,464	
	Overhead (10 Percent)				\$30,446	
	Profit (10 Percent)				\$30,446	
	Estimated NET Construction Cost				\$365,357	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$18,268	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$27,402	
	Total Estimated NET Cost of Construction				\$411,026	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate By: Parametrix, Inc.
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Estimate is Based on 2011 Costs

DEVILS ISLAND - Fog Signal Building

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$39,666	\$39,666	\$103,053
	Remove Finishes - Floor, Wall & Ceiling	1,316	SF	\$2.68	\$3,527	\$9,163
					\$43,193	\$112,216
	ARCHITECTURAL					
	Exterior Wall - Repoint Masonry	126	SF	\$14.98	\$1,887	\$4,904
	Exterior Wall - Repair Existing Shingles	200	SF	\$10.70	\$2,140	\$5,560
	Roofing, Repair Existing	1,222	SF	\$3.21	\$3,923	\$10,191
	Windows, Paint Frame, Sash & Repair Hardware	108	SF	\$23.54	\$2,542	\$6,605
	Door, Refinish & Replace Hardware - Existing	6	LEAF	\$749.00	\$4,494	\$11,675
	Flooring, Repair & Paint Existing	819	SF	\$3.21	\$2,629	\$6,830
	Ceiling, Repair Existing	128	SF	\$5.35	\$685	\$1,779
	Paint, Interior Wall & Ceiling	2,568	SF	\$1.61	\$4,134	\$10,741
	Paint, Exterior Trim	1,222	SF	\$3.21	\$3,923	\$10,191
	Paint, Miscellaneous Items	1	LS	\$1,000	\$1,000	\$2,598
					\$27,357	\$71,075
	STRUCTURAL					
	Wall Framing, Replace South Addition	380	SF	\$9.63	\$3,659	\$9,507
	Roof Structure, Reinforce Existing	754	SF	\$10.70	\$8,068	\$20,960
					\$11,727	\$30,467

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate By: Parametrix, Inc.
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Date: March 4, 2011

Estimate is Based on 2011 Costs

DEVILS ISLAND - Fog Signal Building

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL				Not Required	
	ELECTRICAL					
	Replace Light Fixtures	10	EA	\$240.75	\$2,408	\$6,255
	Replace Branch Circuitry	1,316	SF	\$4.28	\$5,632	\$14,633
					\$8,040	\$20,888
	Subtotal Direct Construction Costs				\$90,317	\$234,646
	Published Location Factor (Negative 5.3 Percent)				-\$4,787	
	Remoteness Factor (20 Percent)				\$18,063	
	Federal Wage Rate Factor (7.5 Percent)				\$3,387	
	Design Contingency (20 Percent)				\$18,063	
	Total Direct Construction Costs				\$125,044	
	Standard General Conditions (14 Percent)				\$17,506	
	Government General Conditions (8 Percent)				\$10,004	
	Bond (2 Percent)				\$2,501	
	Historic Preservation Factor (15 Percent)				\$18,757	
	Subtotal NET Construction Cost				\$173,812	
	Overhead (10 Percent)				\$17,381	
	Profit (10 Percent)				\$17,381	
	Estimated NET Construction Cost				\$208,574	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$10,429	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$15,643	
	Total Estimated NET Cost of Construction				\$234,646	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate is Based on 2011 Costs

DEVILS ISLAND - Oil House #1

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$1,985	\$1,985	\$5,157
					\$1,985	\$5,157
	ARCHITECTURAL					
	Remove Loose Mortar & Repoint Masonry	1	LS	\$1,000	\$1,000	\$2,598
	Door, Repair Frame	1	LEAF	\$535.00	\$535	\$1,390
					\$1,535	\$3,988
	STRUCTURAL					Not Required
	MECHANICAL					Not Required
	ELECTRICAL					Not Required
	Subtotal Direct Construction Costs				\$3,520	\$9,145
	Published Location Factor (Negative 5.3 Percent)				-\$187	
	Remoteness Factor (20 Percent)				\$704	
	Federal Wage Rate Factor (7.5 Percent)				\$132	
	Design Contingency (20 Percent)				\$704	
	Total Direct Construction Costs				\$4,873	
	Standard General Conditions (14 Percent)				\$682	
	Government General Conditions (8 Percent)				\$390	
	Bond (2 Percent)				\$97	
	Historic Preservation Factor (15 Percent)				\$731	
	Subtotal NET Construction Cost				\$6,774	
	Overhead (10 Percent)				\$677	
	Profit (10 Percent)				\$677	
	Estimated NET Construction Cost				\$8,129	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$406	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$610	
	Total Estimated NET Cost of Construction				\$9,145	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

DEVILS ISLAND - Oil House #2

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$3,032	\$3,032	\$7,877
					\$3,032	\$7,877
	ARCHITECTURAL					
	Remove & Replace Metal Roof Shingles	144	SF	\$9.10	\$1,310	\$3,404
	Install Roof Ridge Cap	26	LF	\$40.66	\$1,057	\$2,747
	Paint, Roof & Trim	144	SF	\$6.42	\$924	\$2,402
	Paint, Interior Wall & Ceiling	59	SF	\$3.21	\$189	\$492
					\$3,481	\$9,045
	STRUCTURAL					Not Required
	MECHANICAL					Not Required
	ELECTRICAL					Not Required
	Subtotal Direct Construction Costs				\$6,513	\$16,922
	Published Location Factor (Negative 5.3 Percent)				-\$345	
	Remoteness Factor (20 Percent)				\$1,303	
	Federal Wage Rate Factor (7.5 Percent)				\$244	
	Design Contingency (20 Percent)				\$1,303	
	Total Direct Construction Costs				\$9,018	
	Standard General Conditions (14 Percent)				\$1,262	
	Government General Conditions (8 Percent)				\$721	
	Bond (2 Percent)				\$180	
	Historic Preservation Factor (15 Percent)				\$1,353	
	Subtotal NET Construction Cost				\$12,535	
	Overhead (10 Percent)				\$1,253	
	Profit (10 Percent)				\$1,253	
	Estimated NET Construction Cost				\$15,042	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$752	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$1,128	
	Total Estimated NET Cost of Construction				\$16,922	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
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Estimate By: Parametrix, Inc.
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Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

DEVILS ISLAND - Tramway Engine Building

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$6,497	\$6,497	\$16,879
					\$6,497	\$16,879
	ARCHITECTURAL					
	Exterior Wall - Repoint Masonry	16	SF	\$14.98	\$240	\$623
	Windows, Paint Frame & Sash & Replace Glazing Putty	27	SF	\$23.54	\$636	\$1,651
	Door, Refinish & Replace Hardware - Existing	2	LEAF	\$749.00	\$1,498	\$3,892
	Paint, Soffit & Trim	62	SF	\$3.75	\$233	\$604
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,299
					\$3,106	\$8,069
	STRUCTURAL				Not Required	
	MECHANICAL				Not Required	
	ELECTRICAL				Not Required	
	Subtotal Direct Construction Costs				\$9,603	\$24,948
	Published Location Factor (Negative 5.3 Percent)				-\$509	
	Remoteness Factor (20 Percent)				\$1,921	
	Federal Wage Rate Factor (7.5 Percent)				\$360	
	Design Contingency (20 Percent)				\$1,921	
	Total Direct Construction Costs				\$13,295	
	Standard General Conditions (14 Percent)				\$1,861	
	Government General Conditions (8 Percent)				\$1,064	
	Bond (2 Percent)				\$266	
	Historic Preservation Factor (15 Percent)				\$1,994	
	Subtotal NET Construction Cost				\$18,480	
	Overhead (10 Percent)				\$1,848	
	Profit (10 Percent)				\$1,848	
	Estimated NET Construction Cost				\$22,176	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$1,109	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$1,663	
	Total Estimated NET Cost of Construction				\$24,948	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

DEVILS ISLAND - Boathouse

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$5,000	\$5,000	\$12,990
	Remove Floor Planking & Structure	130	SF	\$9.63	\$1,252	\$3,252
					\$6,252	\$16,243
	ARCHITECTURAL					
	Exterior Wall - Repair Existing	1,070	SF	\$5.35	\$5,725	\$14,872
	Wood Stairs, Railings & Landing	1	FLT	\$1,070	\$1,070	\$2,780
	Windows, Repair & Paint Frame & Sash & Replace Glazing Putty	7	SF	\$47.08	\$330	\$856
	Door, Repair & Refinish Original	2	LEAF	\$749.00	\$1,498	\$3,892
	Paint, Exterior Siding & Trim	1,070	SF	\$2.68	\$2,868	\$7,450
	Paint, Soffit & Trim	63	SF	\$3.75	\$236	\$614
	Paint, Miscellaneous Items	1	LS	\$1,000	\$1,000	\$2,598
					\$12,726	\$33,062
	STRUCTURAL					
	Wood Floor Planking & Structure	130	SF	\$26.75	\$3,478	\$9,035
	Floor Structure, Reinforce Existing	576	SF	\$10.70	\$6,163	\$16,012
	Wall & Roof Framing, Reinforce / Replace Existing	925	SF	\$9.63	\$8,908	\$23,142
					\$18,548	\$48,189

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

DEVILS ISLAND - Boathouse

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL				Not Required	
	ELECTRICAL				Not Required	
	Subtotal Direct Construction Costs				\$37,526	\$97,494
	Published Location Factor (Negative 5.3 Percent)				-\$1,989	
	Remoteness Factor (20 Percent)				\$7,505	
	Federal Wage Rate Factor (7.5 Percent)				\$1,407	
	Design Contingency (20 Percent)				\$7,505	
	Total Direct Construction Costs				\$51,955	
	Standard General Conditions (14 Percent)				\$7,274	
	Government General Conditions (8 Percent)				\$4,156	
	Bond (2 Percent)				\$1,039	
	Historic Preservation Factor (15 Percent)				\$7,793	
	Subtotal NET Construction Cost				\$72,218	
	Overhead (10 Percent)				\$7,222	
	Profit (10 Percent)				\$7,222	
	Estimated NET Construction Cost				\$86,661	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$4,333	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$6,500	
	Total Estimated NET Cost of Construction				\$97,494	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

SUMMARY - LONG ISLAND

Item	Description		Direct Cost	Total Net
	LONG ISLAND - Site Improvements		\$66,940	\$173,911
	LONG ISLAND - La Pointe Light Tower		\$84,122	\$218,550
	LONG ISLAND - Chequamegon Point Lighthouse		\$30,157	\$78,349
	LONG ISLAND - Triplex		\$352,051	\$914,633
	LONG ISLAND - Oil Building		\$5,198	\$13,504
	TOTAL (Long Island)		\$538,468	\$1,398,947

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

LONG ISLAND - Site Improvements

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	SITE IMPROVEMENTS - Cost Per Consultant					
	Site Clearing, 5.2 Acres	1	LS	\$12,890	\$12,890	\$33,488
	Site Circulation / Accessibility	1	LS	\$29,700	\$29,700	\$77,161
	Site Structures	1	LS	\$19,250	\$19,250	\$50,012
	Small Scale Site Features	1	LS	\$4,500	\$4,500	\$11,691
	Landscape Plantings	1	LS	\$600.00	\$600	\$1,559
					\$66,940	\$173,911
	Subtotal Direct Construction Costs				\$66,940	\$173,911
	Published Location Factor (Negative 5.3 Percent)				-\$3,548	
	Remoteness Factor (20 Percent)				\$13,388	
	Federal Wage Rate Factor (7.5 Percent)				\$2,510	
	Design Contingency (20 Percent)				\$13,388	
	Total Direct Construction Costs				\$92,678	
	Standard General Conditions (14 Percent)				\$12,975	
	Government General Conditions (8 Percent)				\$7,414	
	Bond (2 Percent)				\$1,854	
	Historic Preservation Factor (15 Percent)				\$13,902	
	Subtotal NET Construction Cost				\$128,823	
	Overhead (10 Percent)				\$12,882	
	Profit (10 Percent)				\$12,882	
	Estimated NET Construction Cost				\$154,588	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$7,729	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$11,594	
	Total Estimated NET Cost of Construction				\$173,911	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

LONG ISLAND - La Pointe Light Tower

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$29,775	\$29,775	\$77,356
	Remove Exterior Window	7	SF	\$8.56	\$60	\$156
	Remove Finishes - Floor, Wall & Ceiling	334	SF	\$2.68	\$895	\$2,326
					\$30,730	\$79,837
	ARCHITECTURAL					
	Repair Exterior Wall	30	SF	\$21.40	\$642	\$1,668
	Handrails	61	LF	\$96.30	\$5,874	\$15,262
	Windows, New Glazing	7	SF	\$117.70	\$824	\$2,141
	Windows, Paint Frame & Sash	69	SF	\$23.54	\$1,624	\$4,220
	Door, Repaint & Replace Hardware - Existing	5	LEAF	\$749.00	\$3,745	\$9,730
	Door, Remove & Patch Rust	5	LEAF	\$856.00	\$4,280	\$11,120
	Patch Roof Rust	62	SF	\$4.28	\$265	\$689
	Paint, Floor	350	SF	\$2.94	\$1,029	\$2,673
	Paint, Roof & Trim	62	SF	\$12.84	\$796	\$2,068
	Paint, Exterior Siding & Trim	1,045	SF	\$2.68	\$2,801	\$7,276
	Paint, Interior Wall & Ceiling	640	SF	\$1.61	\$1,030	\$2,677
	Paint, Stairs	3	FLT	\$1,070	\$3,210	\$8,340
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,299
					\$26,621	\$69,161
	STRUCTURAL					
	Foundation, Repair Cracks	130	SF	\$42.80	\$5,564	\$14,455
	Bases / Belled Ends, Repair Existing	8	EA	\$909.50	\$7,276	\$18,903
	Additional Investigation, Allowance	1	LS	\$10,000	\$10,000	\$25,980
					\$22,840	\$59,339

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

LONG ISLAND - La Pointe Light Tower						
Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	HVAC, Increase Ventilation - Passive	334	SF	\$5.35	\$1,787	\$4,642
					\$1,787	\$4,642
	ELECTRICAL					
	Inspect / Replace Lightning Protection System	334	SF	\$6.42	\$2,144	\$5,571
					\$2,144	\$5,571
	Subtotal Direct Construction Costs				\$84,122	\$218,550
	Published Location Factor (Negative 5.3 Percent)				-\$4,458	
	Remoteness Factor (20 Percent)				\$16,824	
	Federal Wage Rate Factor (7.5 Percent)				\$3,155	
	Design Contingency (20 Percent)				\$16,824	
	Total Direct Construction Costs				\$116,467	
	Standard General Conditions (14 Percent)				\$16,305	
	Government General Conditions (8 Percent)				\$9,317	
	Bond (2 Percent)				\$2,329	
	Historic Preservation Factor (15 Percent)				\$17,470	
	Subtotal NET Construction Cost				\$161,889	
	Overhead (10 Percent)				\$16,189	
	Profit (10 Percent)				\$16,189	
	Estimated NET Construction Cost				\$194,267	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$9,713	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$14,570	
	Total Estimated NET Cost of Construction				\$218,550	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

LONG ISLAND - Chequamegon Point Lighthouse

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$24,427	\$24,427	\$63,462
	Remove Finishes - Floor, Wall & Ceiling	159	SF	\$2.68	\$426	\$1,107
					\$24,853	\$64,569
	ARCHITECTURAL					
	Windows, Paint Frame & Sash	16	SF	\$47.08	\$753	\$1,957
	Windows, Remove Plexiglas & Provide New Glazing	16	SF	\$58.85	\$942	\$2,446
	Paint, Roof & Trim	50	SF	\$12.84	\$642	\$1,668
	Paint, Exterior Siding & Trim	437	SF	\$2.68	\$1,171	\$3,043
	Paint, Interior Wall & Ceiling	171	SF	\$1.61	\$275	\$715
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,299
					\$4,283	\$11,128
	STRUCTURAL				Not Required	
	MECHANICAL				Not Required	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

LONG ISLAND - Chequamegon Point Lighthouse						
Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	ELECTRICAL					
	(USCG Light & Power Equipment Relocation Not Included)					
	Inspect / Replace Lightning Protection System	159	SF	\$6.42	\$1,021	\$2,652
					\$1,021	\$2,652
	Subtotal Direct Construction Costs				\$30,157	\$78,349
	Published Location Factor (Negative 5.3 Percent)				-\$1,598	
	Remoteness Factor (20 Percent)				\$6,031	
	Federal Wage Rate Factor (7.5 Percent)				\$1,131	
	Design Contingency (20 Percent)				\$6,031	
	Total Direct Construction Costs				\$41,753	
	Standard General Conditions (14 Percent)				\$5,845	
	Government General Conditions (8 Percent)				\$3,340	
	Bond (2 Percent)				\$835	
	Historic Preservation Factor (15 Percent)				\$6,263	
	Subtotal NET Construction Cost				\$58,036	
	Overhead (10 Percent)				\$5,804	
	Profit (10 Percent)				\$5,804	
	Estimated NET Construction Cost				\$69,644	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$3,482	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$5,223	
	Total Estimated NET Cost of Construction				\$78,349	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

LONG ISLAND - Triplex

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$112,929	\$112,929	\$293,391
	Remove Roof Sheathing	986	SF	\$2.14	\$2,110	\$5,482
	Remove Roofing, Shingles	1,971	SF	\$3.21	\$6,327	\$16,437
	Remove Plywood Infill at Windows	100	SF	\$3.21	\$321	\$834
	Remove Finishes - Floor, Wall & Ceiling	4,830	SF	\$2.68	\$12,944	\$33,630
					\$134,631	\$349,774
	ARCHITECTURAL					
	Moisture Barrier, Foundation	1,568	SF	\$10.70	\$16,778	\$43,588
	Roofing, Repair Hole at Cornice	1	LS	\$500.00	\$500	\$1,299
	Roofing, Asphalt Shingles, Felt & Flashings	1,971	SF	\$6.96	\$13,718	\$35,640
	Windows, Epoxy Stabilize & Patch Areas of Rust	600	SF	\$9.10	\$5,460	\$14,185
	Windows, New Glazing	600	SF	\$58.85	\$35,310	\$91,736
	Windows, Paint Frame & Sash	600	SF	\$16.05	\$9,630	\$25,019
	Interior Wall Framing & Gypsum Board	1,600	SF	\$8.56	\$13,696	\$35,582
	Porch, Epoxy Stabilize & Paint	57	SF	\$13.91	\$793	\$2,060
	Ceiling, Gypsum Board	1,605	SF	\$2.14	\$3,435	\$8,923
	Paint, Exterior Siding & Trim	2,692	SF	\$2.68	\$7,215	\$18,744
					\$106,534	\$276,777
	STRUCTURAL					
	Floor Structure, Reinforce Existing	1,620	SF	\$8.56	\$13,867	\$36,027
	Wall Structure, Repair Column Base	1	LS	\$750.00	\$750	\$1,949
	Roof Structure, Reinforce Existing	1,981	SF	\$12.84	\$25,436	\$66,083
	Roof Sheathing	986	SF	\$3.21	\$3,165	\$8,223
					\$43,218	\$112,282

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

LONG ISLAND - Triplex						
Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	Remove Plumbing Fixtures & Piping	12	EA	\$267.50	\$3,210	\$8,340
	HVAC, Increase Ventilation	4,830	SF	\$5.35	\$25,841	\$67,134
					\$29,051	\$75,474
	ELECTRICAL					
	Remove Light Fixtures	4,830	SF	\$0.54	\$2,608	\$6,776
	Photovoltaic System (Ventilation)	4,830	SF	\$6.42	\$31,009	\$80,561
	Overcurrent Protection	1	LS	\$5,000	\$5,000	\$12,990
					\$38,617	\$100,327
	Subtotal Direct Construction Costs				\$352,051	\$914,633
	Published Location Factor (Negative 5.3 Percent)				-\$18,659	
	Remoteness Factor (20 Percent)				\$70,410	
	Federal Wage Rate Factor (7.5 Percent)				\$13,202	
	Design Contingency (20 Percent)				\$70,410	
	Total Direct Construction Costs				\$487,414	
	Standard General Conditions (14 Percent)				\$68,238	
	Government General Conditions (8 Percent)				\$38,993	
	Bond (2 Percent)				\$9,748	
	Historic Preservation Factor (15 Percent)				\$73,112	
	Subtotal NET Construction Cost				\$677,506	
	Overhead (10 Percent)				\$67,751	
	Profit (10 Percent)				\$67,751	
	Estimated NET Construction Cost				\$813,007	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$40,650	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$60,976	
	Total Estimated NET Cost of Construction				\$914,633	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

LONG ISLAND - Oil Building

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$1,908	\$1,908	\$4,957
	Remove Finishes - Floor, Wall & Ceiling	42	SF	\$10.70	\$449	\$1,168
					\$2,357	\$6,125
	ARCHITECTURAL					
	Door, Refinish & Replace Hardware - Existing	1	LEAF	\$749.00	\$749	\$1,946
	Paint, Roof Vent	1	EA	\$428.00	\$428	\$1,112
	Paint, Roof & Trim	94	SF	\$3.75	\$353	\$916
	Paint, Exterior Siding & Trim	210	SF	\$2.68	\$563	\$1,462
	Paint, Interior Wall & Ceiling	154	SF	\$1.61	\$248	\$644
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,299
					\$2,840	\$7,379
	STRUCTURAL				Not Required	
	MECHANICAL				Not Required	
	ELECTRICAL				Not Required	
	Subtotal Direct Construction Costs				\$5,198	\$13,504
	Published Location Factor (Negative 5.3 Percent)				-\$275	
	Remoteness Factor (20 Percent)				\$1,040	
	Federal Wage Rate Factor (7.5 Percent)				\$195	
	Design Contingency (20 Percent)				\$1,040	
	Total Direct Construction Costs				\$7,196	
	Standard General Conditions (14 Percent)				\$1,007	
	Government General Conditions (8 Percent)				\$576	
	Bond (2 Percent)				\$144	
	Historic Preservation Factor (15 Percent)				\$1,079	
	Subtotal NET Construction Cost				\$10,003	
	Overhead (10 Percent)				\$1,000	
	Profit (10 Percent)				\$1,000	
	Estimated NET Construction Cost				\$12,003	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$600	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$900	
	Total Estimated NET Cost of Construction				\$13,504	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

SUMMARY - SAND ISLAND

Item	Description		Direct Cost	Total Net
	SAND ISLAND - Site Improvements		\$24,120	\$62,664
	SAND ISLAND - Light Station Quarters		\$233,990	\$607,910
	SAND ISLAND - Oil Building		\$4,172	\$10,839
	SAND ISLAND - Privy		\$6,833	\$17,752
	TOTAL (Sand Island)		\$269,115	\$699,164

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

SAND ISLAND - Site Improvements

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	SITE IMPROVEMENTS - Cost Per Consultant					
	Site Clearing, 1.0 Acre	1	LS	\$3,540	\$3,540	\$9,197
	Site Circulation / Accessibility	1	LS	\$7,680	\$7,680	\$19,953
	Small Scale Site Features	1	LS	\$5,875	\$5,875	\$15,263
	Station Vegetation	1	LS	\$7,025	\$7,025	\$18,251
					\$24,120	\$62,664
	Subtotal Direct Construction Costs				\$24,120	\$62,664
	Published Location Factor (Negative 5.3 Percent)				-\$1,278	
	Remoteness Factor (20 Percent)				\$4,824	
	Federal Wage Rate Factor (7.5 Percent)				\$905	
	Design Contingency (20 Percent)				\$4,824	
	Total Direct Construction Costs				\$33,394	
	Standard General Conditions (14 Percent)				\$4,675	
	Government General Conditions (8 Percent)				\$2,672	
	Bond (2 Percent)				\$668	
	Historic Preservation Factor (15 Percent)				\$5,009	
	Subtotal NET Construction Cost				\$46,418	
	Overhead (10 Percent)				\$4,642	
	Profit (10 Percent)				\$4,642	
	Estimated NET Construction Cost				\$55,701	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$2,785	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$4,178	
	Total Estimated NET Cost of Construction				\$62,664	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

SAND ISLAND - Light Station Quarters

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$57,645	\$57,645	\$149,763
	Remove Roofing, Shingles	2,071	SF	\$3.21	\$6,648	\$17,271
	Remove Finishes - Floor, Wall & Ceiling	2,132	SF	\$2.68	\$5,714	\$14,844
					\$70,007	\$181,878
	ARCHITECTURAL					
	Chimney Liner	38	LF	\$107.00	\$4,066	\$10,564
	Wood Ramp, ADA	16	SF	\$133.75	\$2,140	\$5,560
	Handrails	42	LF	\$96.30	\$4,045	\$10,508
	Millwork, Refinish Existing	15	LF	\$160.50	\$2,408	\$6,255
	Windows, Paint Frame, Sash & Replace Hardware	314	SF	\$16.05	\$5,040	\$13,093
	Windows, New Lantern Glazing	80	SF	\$58.85	\$4,708	\$12,231
	Door, Refinish & Replace Hardware - Existing	17	LEAF	\$749.00	\$12,733	\$33,081
	Roofing, Metal Shingles & Flashings	2,071	SF	\$17.12	\$35,456	\$92,114
	Raingutter & Downspouts	156	LF	\$48.15	\$7,511	\$19,515
	Replace Missing Brass Intake Caps	5	EA	\$214.00	\$1,070	\$2,780
	Wood Flooring, Refinish Original	1,384	SF	\$5.35	\$7,404	\$19,237
	Flooring, Repair Existing	192	SF	\$3.21	\$616	\$1,601
	Paint & Repair Plaster, Interior Wall & Ceiling	3,078	SF	\$4.28	\$13,174	\$34,226
	Paint, Stairs	1	FLT	\$1,070	\$1,070	\$2,780
	Paint, Miscellaneous Items	1	LS	\$2,000	\$2,000	\$5,196
					\$103,440	\$268,739
	STRUCTURAL					
	Floor Sheathing	99	SF	\$6.42	\$636	\$1,651
	Floor Structure, Reinforce Existing	96	SF	\$37.45	\$3,595	\$9,340
	Roof Structure, Reinforce Existing	272	SF	\$21.40	\$5,821	\$15,123
					\$10,052	\$26,114

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

SAND ISLAND - Light Station Quarters

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL					
	Remove Unused Propane Piping	20	LF	\$21.40	\$428	\$1,112
	Cistern, Clean, Paint & Seal Existing	1	EA	\$5,350	\$5,350	\$13,899
	HVAC, Increase Ventilation	2,132	SF	\$9.10	\$19,401	\$50,405
					\$25,179	\$65,416
	ELECTRICAL					
	Replace Lightning Protection System	2,132	SF	\$4.28	\$9,125	\$23,707
	Photovoltaic System (Ventilation)	2,132	SF	\$6.42	\$13,687	\$35,560
	Overcurrent Protection	1	LS	\$2,500	\$2,500	\$6,495
					\$25,312	\$65,762
	Subtotal Direct Construction Costs				\$233,990	\$607,910
	Published Location Factor (Negative 5.3 Percent)				-\$12,401	
	Remoteness Factor (20 Percent)				\$46,798	
	Federal Wage Rate Factor (7.5 Percent)				\$8,775	
	Design Contingency (20 Percent)				\$46,798	
	Total Direct Construction Costs				\$323,959	
	Standard General Conditions (14 Percent)				\$45,354	
	Government General Conditions (8 Percent)				\$25,917	
	Bond (2 Percent)				\$6,479	
	Historic Preservation Factor (15 Percent)				\$48,594	
	Subtotal NET Construction Cost				\$450,303	
	Overhead (10 Percent)				\$45,030	
	Profit (10 Percent)				\$45,030	
	Estimated NET Construction Cost				\$540,364	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$27,018	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$40,527	
	Total Estimated NET Cost of Construction				\$607,910	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

SAND ISLAND - Oil Building

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$2,191	\$2,191	\$5,692
					\$2,191	\$5,692
	ARCHITECTURAL					
	Door, Refinish & Replace Hardware - Existing	1	LEAF	\$749.00	\$749	\$1,946
	Paint, Interior Wall & Ceiling	228	SF	\$3.21	\$732	\$1,901
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,299
					\$1,981	\$5,146
	STRUCTURAL				Not Required	
	MECHANICAL				Not Required	
	ELECTRICAL				Not Required	
	Subtotal Direct Construction Costs				\$4,172	\$10,839
	Published Location Factor (Negative 5.3 Percent)				-\$221	
	Remoteness Factor (20 Percent)				\$834	
	Federal Wage Rate Factor (7.5 Percent)				\$156	
	Design Contingency (20 Percent)				\$834	
	Total Direct Construction Costs				\$5,776	
	Standard General Conditions (14 Percent)				\$809	
	Government General Conditions (8 Percent)				\$462	
	Bond (2 Percent)				\$116	
	Historic Preservation Factor (15 Percent)				\$866	
	Subtotal NET Construction Cost				\$8,029	
	Overhead (10 Percent)				\$803	
	Profit (10 Percent)				\$803	
	Estimated NET Construction Cost				\$9,634	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$482	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$723	
	Total Estimated NET Cost of Construction				\$10,839	

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

SAND ISLAND - Privy

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	DEMOLITION					
	Building Related:					
	Hazmat (Mold, Lead, Etc) Cost Per Consultant	1	LS	\$2,087	\$2,087	\$5,422
					\$2,087	\$5,422
	ARCHITECTURAL					
	Millwork, Refinish Existing	5	LF	\$160.50	\$803	\$2,085
	Windows, Paint Frame, Sash & Remove Board	3	SF	\$47.08	\$141	\$367
	Doors, Refinish, Replace Hardware & Add Plexiglass Panel	1	LEAF	\$909.50	\$910	\$2,363
	Roofing, Replace Metal Ball Closures at Edges of Ridge	2	EA	\$304.95	\$610	\$1,585
	Paint, Exterior Siding & Trim	20	SF	\$10.70	\$214	\$556
	Paint & Repair Plaster, Interior Wall & Ceiling	163	SF	\$8.56	\$1,395	\$3,625
	Paint, Miscellaneous Items	1	LS	\$500.00	\$500	\$1,299
					\$4,572	\$11,879
	STRUCTURAL					
	Floor Sheathing	27	SF	\$6.42	\$173	\$450
					\$173	\$450

Project: Light Stations of Michigan, Outer, Devils, Long & Sand Islands
Park: Apostle Islands National Lakeshore
PMIS: 154596

Estimate By: Parametrix, Inc.
Date: March 4, 2011

Reviewed By: Parametrix, Inc.
Date: March 4, 2011

Estimate is Based on 2011 Costs

SAND ISLAND - Privy						
Item	Description	Quantity	Unit	Cost/Unit	Direct Cost	Total Net
	MECHANICAL				Not Required	
	ELECTRICAL				Not Required	
	Subtotal Direct Construction Costs				\$6,833	\$17,752
	Published Location Factor (Negative 5.3 Percent)				-\$362	
	Remoteness Factor (20 Percent)				\$1,367	
	Federal Wage Rate Factor (7.5 Percent)				\$256	
	Design Contingency (20 Percent)				\$1,367	
	Total Direct Construction Costs				\$9,460	
	Standard General Conditions (14 Percent)				\$1,324	
	Government General Conditions (8 Percent)				\$757	
	Bond (2 Percent)				\$189	
	Historic Preservation Factor (15 Percent)				\$1,419	
	Subtotal NET Construction Cost				\$13,149	
	Overhead (10 Percent)				\$1,315	
	Profit (10 Percent)				\$1,315	
	Estimated NET Construction Cost				\$15,779	
	Contracting Method Adjustment (Pre-Qualified Open Competitive - 5 Percent)				\$789	
	Inflation Escalation (22 Months to Midpoint of Construction, Jan 2013 - 7.5 Percent)				\$1,183	
	Total Estimated NET Cost of Construction				\$17,752	

1 LANDSCAPE COST ESTIMATE DETAILS

2

Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

Michigan Island

Park: Apostole Islands National Lakeshore
Package: Michigan Island Treatment Preferred Alternative

Reviewed By: _____
Date: 2/7/11

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost
Division 01					
Division 02					
	Site Clearing				
1	Clear forest to meadow (inc. stump removal)	2.2	acre	\$ 4,000.00	\$ 8,800.00
2	Selective Removal of embankment of trees	1.8	acre	\$ 3,000.00	\$ 5,400.00
3	Stabilize embankment	1	ls	\$ 14,000.00	\$ 14,000.00
	Subtotal				\$ 28,200.00
	Circulation/Site Accessibility				
1	Retain boat dock location	1	ls	\$ -	\$ -
2	Repair tramway to working condition	1	ls	\$ -	\$ -
3	Repair tramway	1	ls	\$ 1,200.00	\$ 1,200.00
4	Repair tram turntable (see power house)	1	ls	\$ -	\$ -
5	Repair tramway railing (west side)	130	lf	\$ 50.00	\$ 6,500.00
6	Add tramway railing (east side)	130	lf	\$ 100.00	\$ 13,000.00
7	Repair tram tracks by replacing timbers and resetting tracks	345	lf	\$ 25.00	\$ 8,625.00
8	Widen concrete walks (410 lf)	820	sf	\$ 6.00	\$ 4,920.00
9	Repair concrete walks	200	sf	\$ 10.00	\$ 2,000.00
	Subtotal				\$ 36,245.00
	Structures				
1	Protect Area of Root Cellar	1	ls	\$ 2,500.00	\$ 2,500.00
2	Mark Oil Building	1	ls	\$ 5,000.00	\$ 5,000.00
3					
	Subtotal				\$ 7,500.00
	Small Scale Features				
1	Relocate solar panel to less obtrusive location.	1	ls	\$ -	\$ -
2	Repaint flagpole	1	ls	\$ 1,000.00	\$ 1,000.00
3	Restore missing small scale features (birdbath, planter)	1	ls	\$ 250.00	\$ 250.00
4	Relocate fire pit	1	ls	\$ 250.00	\$ 250.00
5	Maintain radio antennae pole and base (2)	1	ls	\$ 1,000.00	\$ 1,000.00
6	Maintain drainage system	1	ls	\$ 500.00	\$ 500.00
7	Retain non-contributing features--misc. concrete footings	1	ls	\$ -	\$ -
	Subtotal				\$ 3,000.00
	Station Vegetation				
1	Restore orchard planting pattern				
	Preserve Existing Apple Tree	1	ea	\$ 500.00	\$ 500.00
	Replant orchard trees	12	ea	\$ 250.00	\$ 3,000.00
2	Restore Pine Plantings				
	Preserve Existing Pines (pruning)	9	ea	\$ 500.00	\$ 4,500.00
	New Pine plantings	7	ea	\$ 250.00	\$ 1,750.00
3	Restore Landscape Features at Old MI Lighthouse				
	Tree Plantings	12	ea	\$ 250.00	\$ 3,000.00
	Stone Planters	7	ea	\$ 250.00	\$ 1,750.00
	Shrub Plantings	25	ea	\$ 25.00	\$ 625.00
	Perennial Plantings	1	ls	\$ 750.00	\$ 750.00
	Wood Fencing	400	ea	\$ 10.00	\$ 4,000.00
4	Restore Landscape Features at Keepers Quarters				
	Remove and replant Cedar hedge	30	ea	\$ 30.00	\$ 900.00
	Restore stone planter feature	5	ea	\$ 250.00	\$ 1,250.00
	Perennial plantings	1	ls	\$ 750.00	\$ 750.00
5	Remove non-contributing trees west of Old Lighthouse (4)	8	ea	\$ 500.00	\$ 4,000.00
6	Remove invasive plant materials from landscape	1	ls	\$ 2,500.00	\$ 2,500.00
	Subtotal				\$ 29,275.00
	SUBTOTAL SITE WORK				\$ 104,220.00

APPENDIX A

Outer Island

Park: Apostile Islands National Lakeshore
Package: Outer Island Treatment Preferred Alternative

Reviewed By:
Date: 2/7/2011

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost
Division 01					
Division 02					
	Clearing				
1	Clear forest to meadow (inc. stump removal)	1.2	acre	\$ 4,000.00	\$ 4,800.00
2	Selective clearing of trees on embankment	1.3	acre	\$ 3,000.00	\$ 3,900.00
3	Stabilize embankment	1	ls	\$ 11,000.00	\$ 11,000.00
4	Maintain Drainage Swale	1165	lf	\$ 0.50	\$ 582.50
	Subtotal				\$ 20,282.50
	Circulation/Site Accessibility				
1	Retain current Boat Dock location	1	ls	\$ -	\$ -
2	Repair tramway to working condition	1	ls	\$ 2,500.00	\$ 2,500.00
3	Maintain tram tracks	145	lf	\$10.00	\$1,450.00
4	Repair tramway railings (east side)	110	lf	\$ 37.50	\$ 4,125.00
5	Add tramway guardrail (west side)	110	lf	\$ 62.50	\$ 6,875.00
6	Repair concrete walks	1	ls	\$ 2,500.00	\$ 2,500.00
	Subtotal				\$ 17,450.00
	Structures				
1	Retain NPS Privy	1	ls	\$ -	\$ -
2	Protect Area of Cabin	1	ls	\$ 2,500.00	\$ 2,500.00
3	Mark historic location of well	1	ls	\$ 250.00	\$ 250.00
	Subtotal				\$ 2,750.00
	Small Scale Features				
1	Retain Park Signs	1	ls	\$ -	\$ -
2	Remove Propane Tanks	1	ls	\$ 1,000.00	\$ 1,000.00
3	Repair Flagpole (bluff)	1	ls	\$ 1,000.00	\$ 1,000.00
4	Retain Concrete Foundation west of Fog Signal Building	1	ls	\$ -	\$ -
5	Stabilize Cistern	1	ls	\$ 500.00	\$ 500.00
6	Retain Fuel Tank	1	ls	\$ -	\$ -
7	Maintain Flag Pole (compass)	1	ls	\$ 250.00	\$ 250.00
8	Repair Ladder Stand	1	ls	\$ 1,500.00	\$ 1,500.00
9	Relocate Fire Pit	1	ls	\$ 250.00	\$ 250.00
10	Retain Solar Panel	1	ls	\$ -	\$ -
	Subtotal				\$ 4,500.00
	Station Vegetation				
1	Remove landscape plantings between FSB and Oil Storage	5	ea	\$ 25.00	\$ 125.00
2	Maintain landscape plantings south of Oil Storage	10	ea	\$ 150.00	\$ 1,500.00
	Subtotal				\$ 1,625.00
	SUBTOTAL SITE WORK				\$ 46,607.50

*Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative*

Devils Island

Park: Apostle Islands National Lakeshore
Package: Devils Island Preferred Alternative

Reviewed By: _____
Date: 2/7/2011

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost
Division 02					
Clearing					
1	Clear forest to brush (stump removal not inc.) between K Q and Tower	1.1	acre	\$ 3,000.00	\$ 3,300.00
2	Clear vegetation along shoreline to low brush	3.7	acre	\$ 2,000.00	\$ 7,400.00
3	Clear forest to brush - west of Tower (stump removal not inc.)	3.5	acre	\$ 3,000.00	\$ 10,500.00
4	Clear forest to lawn south of Tower	0.07	acre	\$ 4,000.00	\$ 280.00
5	Clear forest at tram track corridor	0.13	acre	\$ 3,000.00	\$ 390.00
6	Clear forest to brush (stump removal not inc.) at Tramway Engine Bldg	0.18	acre	\$ 3,000.00	\$ 540.00
	Subtotal	8.68			\$ 22,410.00
Circulation					
1	Maintain hiking trail and corridor to Boat House	5600	lf	\$ 2.75	\$ 15,400.00
2	Maintain hiking trails to East and West Landings	4350	lf	\$ 2.75	\$ 11,962.50
3	Stabilize tram tracks	1600	lf	\$ 12.00	\$ 19,200.00
4	Repair concrete walks	1	ls	\$ 2,500.00	\$ 2,500.00
	Subtotal				\$ 49,062.50
Structures					
1	Maintain pump house	1	ls	\$ 4,000.00	\$ 4,000.00
2	Maintain radio tower	1	ls	\$ 1,000.00	\$ 1,000.00
3	Maintain beacon light	1	ls	\$ 1,000.00	\$ 1,000.00
4	Repair boat dock	1	ls	\$ 20,000.00	\$ 20,000.00
5	Maintain stone jetty	1	ls	\$ 10,000.00	\$ 10,000.00
	Subtotal				\$ 36,000.00
Small Scale Features					
1	Stabilize derrick footings	1	ls	\$ 1,000.00	\$ 1,000.00
2	Repair masonry tram terminal	1	ls	\$ 10,000.00	\$ 10,000.00
3	Remove fencing at Fog Signal Building	1	ls	\$ 1,000.00	\$ 1,000.00
4	Maintain basin north of Tower	1	ls	\$ 1,000.00	\$ 1,000.00
5	Retain footings north of Tower	3	ls	\$ -	\$ -
5	Retain oil tank footings south of Oil House 1	1	ls	\$ -	\$ -
6	Maintain flagpole	1	ls	\$ 250.00	\$ 250.00
7	Maintain well head	1	ls	\$ 125.00	\$ 125.00
8	Retain tramway anchor east of Tramway Engine Building	1	ls	\$ -	\$ -
9	Retain solar panel	1	ls	\$ -	\$ -
10	Retain fire pit	1	ls	\$ -	\$ -
11	Maintain stone wall at Boat House site	1	ls	\$ 500.00	\$ 500.00
	Subtotal				\$ 13,875.00
Landscape Plantings					
1	Maintain ornamental planting bed at Oil House 2	1	ls	\$ 125.00	\$ 125.00
2	Maintain lilac west of Keepers Quarters	1	ea	\$ 125.00	\$ 125.00
3	Preserve lawn clearing	1	ls	\$ -	\$ -
	Subtotal				\$ 250.00
	Subtotal Site Work				\$ 121,597.50

1

2

APPENDIX A

Long Island

Park: Apostle Islands National Lakeshore
Package: Long Island Treatment Preferred Alternative

Reviewed By:
Date: 2/7/11

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost
Division 01					
Division 02					
	Clearing				
	<i>LaPointe</i>				
1	Clear trees to dune along shoreline	1.61	acre	\$ 2,000.00	\$ 3,220.00
2	Clear trees to dune (50' from Buildings)	0.83	acre	\$ 2,000.00	\$ 1,260.00
3	Clear trees to dune at radio beacon tower	0.02	acre	\$ 2,000.00	\$ 40.00
4	Maintain clearing at footpath from LaPointe to south shoreline	0.26	acre	\$ 1,500.00	\$ 390.00
	<i>Original Lighthouse</i>				
1	Clear forest at lighthouse ruin area	1.00	acre	\$ 3,000.00	\$ 3,000.00
	<i>Chequamegon Point</i>				
1	Clear trees 50' from towers	0.00	acre	\$ -	\$ -
	<i>Reservation</i>				
1	Clear forest along walk corridor	1.66	acre	\$ 3,000.00	\$ 4,980.00
	Subtotal	\$ 5.18			\$ 12,890.00
	Circulation/Site Accessibility				
	<i>LaPointe</i>				
1	Maintain Boat Dock in current location	1	ls	\$ 5,000.00	\$ 5,000.00
2	Repair concrete walks	1	ls	\$ 2,500.00	\$ 2,500.00
3	New floating boardwalk across dune	1170	sf	\$ 10.00	\$ 11,700.00
4	Remove boardwalk	0	ls	\$ -	\$ -
5	Preserve corrugated metal path from LaPointe to south shoreline	1	ls	\$ 1,000.00	\$ 1,000.00
	<i>Original Lighthouse</i>				
1	Investigate/locate additional historic walks under sand	1	ls	\$ 1,000.00	\$ 1,000.00
	<i>Chequamegon Point</i>				
1	Investigate/locate additional historic walks under sand	1	ls	\$ 1,000.00	\$ 1,000.00
2	Repair concrete walks	1	ls	\$ 2,500.00	\$ 2,500.00
	<i>Reservation</i>				
1	Investigate/locate additional historic walks under sand	1	ls	\$ 5,000.00	\$ 5,000.00
	Subtotal				\$ 29,700.00
	Structures				
	<i>LaPointe</i>				
1	Maintain Fog Signal Building foundation	1	ls	\$ 750.00	\$ 750.00
2	Stabilize Shed	1	ls	\$ 2,500.00	\$ 2,500.00
3	Remove Utility Units west of Fog Signal Building	1	ls	\$ 1,000.00	\$ 1,000.00
4	Add new NPS restroom (vault)	0	ls	\$ 10,000.00	\$ -
	<i>Original Lighthouse</i>				
1	Stabilize Lighthouse Ruin	1	ls	\$ 2,500.00	\$ 2,500.00
2	Repair Oil Building	1	ls	\$ 2,500.00	\$ 2,500.00
3	Stabilize Privy	1	ls	\$ 2,500.00	\$ 2,500.00
4	Stabilize Root Cellar	1	ls	\$ 2,500.00	\$ 2,500.00
5	Retain Remnant Shed	1	ls	\$ -	\$ -
	<i>Chequamegon Point</i>				
1	Maintain Old Light Tower in current location	1	ls	\$ -	\$ -
2	Remove Light Tower	1	ls	\$ 5,000.00	\$ 5,000.00
	Subtotal				\$ 19,250.00
	Small Scale Features				
	<i>LaPointe</i>				
1	Maintain Cistern and Piping (add lockable top)	1	ls	\$ 2,500.00	\$ 2,500.00
2	Retain Concrete Footings - A (Steel Framed Radio Tower)	1	ls	\$ -	\$ -
3	Retain Concrete Footings - B (Radio Beacon Tower)	1	ls	\$ -	\$ -
4	Retain Remnant Rubble Pile	1	ls	\$ -	\$ -
5	Retain Fuel Tank	1	ls	\$ -	\$ -
6	Retain Septic Bed	1	ls	\$ -	\$ -
7	Repair Flagpole	1	ls	\$ 2,000.00	\$ 2,000.00
8	Preserve Pipe Crib	1	ls	\$ -	\$ -
	<i>Chequamegon Point</i>				
1	Retain Original concrete footing for Old Light Tower	1	ls	\$ -	\$ -
2	Retain Rubble Crib Remnants	1	ls	\$ -	\$ -
	<i>Reservation</i>				
1	Maintain Overhead Electric Line	6270	lf	\$ -	\$ -
	Subtotal				\$ 4,500.00
	Landscape Plantings				
	<i>Original Lighthouse</i>				
1	Maintain Cottonwoods (3) and Maple (1)	4	ea	\$ 150.00	\$ 600.00
	Subtotal				\$ 600.00
	SUBTOTAL SITE WORK				\$66,940.00

Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

1

Sand Island

Park: Apostile Islands National Lakeshore
Package: Sand Island Treatment Preferred Alternative

Reviewed By: _____
Date: 2/7/11

Item	Description	Quantity	Unit	Cost/Unit	Direct Cost
Division 01					
Division 02					
	Clearing				
1	Clear forest to brush (stump removal not inc.)	0.58	acre	\$ 3,000.00	\$ 1,740.00
2	Clear forest to lawn (inc. stump removal)	0.45	acre	\$ 4,000.00	\$ 1,800.00
	Subtotal	1.03			\$ 3,540.00
	Circulation				
1	Repair wooden staircase to landing	1	ls	\$ 2,500.00	\$ 2,500.00
2	Widen concrete walks (140 lf)	280	sf	\$ 6.00	\$ 1,680.00
3	Maintain East Bay trail and cleared corridor (2 miles, 8' width)	2	mile	\$ 1,750.00	\$ 3,500.00
	Subtotal				\$ 7,680.00
	Small Scale Features				
1	Relocate Solar Panel	1	ls	\$ 750.00	\$ 2,000.00
2	Remove Fuel Tank	1	ls	\$ 1,000.00	\$ 2,000.00
3	Retain and Monitor Dump Sites	1	ls	\$ 500.00	\$ 500.00
4	Relocate Fire Pit	1	ls	\$ 250.00	\$ 250.00
5	Remove Flagpole	1	ls	\$ 500.00	\$ 500.00
6	Remove Stone North Arrow	1	ls	\$ 125.00	\$ 125.00
7	Remove and Replace Wooden Headwall	1	ls	\$ 500.00	\$ 500.00
	Subtotal				\$ 5,875.00
	Station Vegetation				
1	Remove non-contributing tree	2	ea	\$ 750.00	\$ 1,500.00
2	Remove non-contributing vegetation	1	ls	\$ 750.00	\$ 750.00
3	Maintain lilacs	3	ea	\$ 125.00	\$ 375.00
4	Clear garden for plantings	1	ls	\$ 500.00	\$ 500.00
5	Restore missing garden features (fencing)	140	lf	\$ 10.00	\$ 1,400.00
6	Remove invasive plant materials from landscape	1	ls	\$1,500.00	\$2,500.00
	Subtotal				\$ 7,025.00
	Subtotal Site Work				\$ 24,120.00

2

APPENDIX A

1

2

PHASING

The park has expressed interest in phasing the overall project and will likely be required due to the budget constraints regardless.

The CLR/HSR recommendations generally follow the outcome of the May 2010 VA/CBA. Due to budget considerations, a second VA/CBA was held in December 2010 which used the May 2010 Preferred Alternative as a basis but reduced the scope to meet the available funding. The following is a list of items the first phase will include. As construction funds allow, the park will initiate the remainder of the CLR/HSR recommendations.

To date, Phase 1 generally includes:

- Focus on three islands: Michigan, Outer, Sand and Devils (no work on Long Island other than the roof of the Triplex.)
- Emphasis on large-scale landscape and major buildings
- Light station site accessibility (only between buildings – park to further study island access)
- Supports some volunteer or staff occupancy
- Supports visitor access (to most major buildings)

Please refer to the following spreadsheet which was included in the December 2010 VA Report as the preferred alternative.

Note that only shaded cells of the third column are included in the scope.

APPENDIX A

1

2

Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

MICHIGAN ISLAND

Preferred Alternative:
Michigan, Outer, Long, Sand Islands with stabilization at Devils

MICHIGAN ISLAND SITE					
	Quantity	Total Net	CLR/HSR Report	CLR/HSR Report Priority	Change from 2010.12.16 VA?
SITE/CULTURAL LANDSCAPE					
Site Clearing	4 ACRES	\$103,101	POOR	SEVERE	N
Site Circulation/ Accessibility	1 L.S.	\$96,652	FAIR	MODERATE	N
Site Structures	1 L.S.	\$72,334	POOR	LOW	N
Small Scale Site Features	1 L.S.	\$8,549	GOOD	LOW	N
Reservation Vegetation	1 L.S.	\$6,576	FAIR to POOR	MODERATE	N
Station Vegetation	1 L.S.	\$71,743	POOR	MODERATE	N
New Boat Dock	1	\$500,000			N

Overall Island Assumptions:

- Focus on (4) islands: Michigan, Outer, Devils and Sand
- Triplex work on Long, by Park
- Emphasis on large-scale landscape and major buildings
- Includes localized site accessibility where noted
- Supports volunteer or staff occupancy
- No lead soil mitigation

\$858,955

OLD MICHIGAN ISLAND LIGHTHOUSE					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, mold and bat guano were identified or assumed to be present.	1 L.S.	\$171,063 (No lead soil mitigation)		MODERATE and LOW	Y (refined hazmat \$, post-VA)
Roof Removal and Replacement	1,459 SF	\$38,646	POOR	SEVERE	N
Repair Plaster and Repoint and Coat Masonry, Exterior Walls	3,389 SF	\$103,940	FAIR	MODERATE	N
Install Rain gutter and Downspouts	120 LF	\$15,056	N/A	MODERATE	N
Enlarge Door Opening	1 EA	\$4,879	POOR	SEVERE	N
Install Exterior Stairs	11 SF	\$1,840	FAIR	SEVERE	N
Remove and Replace Interior Finishes	7,260 SF	\$56,945	POOR	SEVERE	N

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APPENDIX A

Refinish Existing Millwork	15 LF	\$6,273	GOOD to FAIR	MODERATE	N
Install Handrails in Tower and Kitchen Entry	86 LF	\$21,580	FAIR	SEVERE	N
Install Security Gate at Tower Base	1 EA	\$3,625			N
Install New Glazing; Reinstall Glazing in Windows; Repaint Frames and Sash	55 SF; 164 SF; 219 SF	\$30,098	FAIR	MODERATE	N
Paint Tower Roof and Trim	50 SF	\$836	FAIR	MODERATE	N
Paint Miscellaneous	1 LS	\$5,261			N
STRUCTURAL					
Reinforce Existing Floor Structure	62 SF	\$6,050	FAIR	SEVERE	N
Reinforce Existing Roof Structure	55 SF	\$4,600	GOOD	UNKNOWN	N
MECHANICAL					
Remove Plumbing Fixtures and Piping	1 LS; 2 EA	\$4,182	FAIR to POOR	LOW	N
Remove Boiler and Piping; Remove Radiators	1 EA; 2 EA	\$10,316	FAIR	LOW	N
HVAC - Increase Ventilation	2,154 SF	\$51,049	FAIR and POOR	SEVERE	N
ELECTRICAL					
Remove Light Fixtures and Receptacles; Install Photovoltaic System	20 EA; 2,154 SF	\$39,240	POOR	SEVERE	N
Replace Lightning Protection System	1,459 SF	\$16,272	FAIR to POOR	SEVERE	N
		\$591,751			

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Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

SECOND TOWER					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 L.S.	\$13,150 (No lead soil mitigation)		MODERATE and LOW	Y - refined hazmat \$
Roof Repair	280 SF	\$5,465	GOOD	LOW	N
Remove Exterior Plexiglass Window	10 SF	\$223	FAIR	MODERATE	N
Paint Soffit and Trim	50 SF	\$1,673	GOOD	LOW	N
Install Security Gate at Tower Base	1 EA	\$3,625			N
Install New Glazing in Windows; Repaint Frames and Sash	10 SF, 72 SF	\$5,949	FAIR	MODERATE	N
Paint Miscellaneous	1 L.S.	\$1,315			N
STRUCTURAL					
Repair Existing Column Bases	2 EA	\$16,729	GOOD	UNKNOWN - Need to investigate cracked columns.	N
MECHANICAL					
Replace or Repair Brass Vent Caps, Increase Passive Ventilation	8 EA, 262 SF	\$8,113	FAIR	MODERATE	N
ELECTRICAL					
Inspect and Replace Lightning Protection System	262 SF	\$4,383	FAIR	MODERATE	N

\$60,625

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APPENDIX A

KEEPERS QUARTERS					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 LS	\$125,615		MODERATE and LOW	Y- revised hazmat \$, based on information/discussion w hazmat consultant, after VA
Roof Removal and Replacement	1,105 SF	\$29,269	POOR	SEVERE	N
Clean and Repair Exterior Brick	2,245 SF	\$15,781	GOOD	MODERATE	N
Refinish Wood Porch	126 SF	\$10,539	GOOD	LOW	N
Paint Exterior Siding and Trim	200 SF	\$12,268	FAIR	LOW	N
Paint Soffit and Trim	441 SF	\$4,304	FAIR	LOW	N
Install Handrails at Stairs	70 LF	\$17,565	FAIR	SEVERE	N
Repaint Window Frames and Sash	200 SF	\$1,394	GOOD	LOW	N
Refinish Existing Wood Flooring	1,782 SF	\$24,843	FAIR	MODERATE	N
Remove and Replace Interior Finishes	4,667 SF	\$65,516	GOOD	MODERATE	N
Paint Miscellaneous	1 LS	\$5,261			N
STRUCTURAL					
Concrete Slab Infill, Concrete Ramp and Railings (Back Door Landing)	110 SF	\$26,627	FAIR	SEVERE	N
Reinforce Existing Floor Structure	56 SF	\$5,465	GOOD	LOW	N
Reinforce Existing Roof Structure	921 SF	\$30,815	GOOD	LOW	N
MECHANICAL					
HVAC - Increase Ventilation	1,932 SF	\$45,787	FAIR	MODERATE	N
Remove and replace propane piping	175 LF	\$8,434	GOOD	MODERATE	N
ELECTRICAL					
Replace Lightning Protection System	1,105 SF	\$12,324	FAIR	MODERATE	N
Ventilation - Existing PV System Expansion	1,932 SF	\$32,320	FAIR	MODERATE	N

\$474,127

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Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

ASSISTANT KEEPERS QUARTERS & WORKSHOP					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 L S	\$47,422 (No lead soil mitigation)		LOW	Y - refined hazmat \$
Roof Removal and Replacement	714 SF	\$18,912	POOR	SEVERE	N
Install Rain gutter and Downspouts	54 LF	\$6,775	POOR	MODERATE	N
Paint Exterior Siding and Trim	1,134 SF	\$7,904	GOOD	LOW	N
Paint Soffit and Trim	415 SF	\$4,050	GOOD	LOW	N
Install New Glazing, Repaint Window Frames and Sash	50 SF, 98 SF	\$13,678	FAIR	LOW	N
Paint Miscellaneous	1 L S	\$2,630			N
STRUCTURAL					
Reinforce Existing Roof Structure	34 SF	\$2,844	UNKNOWN	MODERATE	N
MECHANICAL					
Cap Unused Piping	1 L S	\$2,630	POOR	LOW	N
HVAC - Increase Ventilation	778 SF	\$18,438	POOR	MODERATE	N
ELECTRICAL					
Replace Feeder Circuitry	778 SF	\$7,592	POOR	MODERATE	N
Ventilation - PV System	778 SF	\$13,015	POOR	MODERATE	N

\$145,890

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APPENDIX A

POWER HOUSE					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 LS	\$34,248 (No lead soil mitigation)		LOW	Y - refined hazmat \$
Roof Removal and Replacement	779 SF	\$20,634	POOR	SEVERE	N
Install Rain gutter and Downspouts	88 LF	\$11,041	N/A - None existing.	SEVERE	N
Repair Exterior Brick	175 SF	\$9,759	GOOD	LOW	N
Paint Soffit and Trim	56 SF	\$546	N/A	LOW	N
Repair Stairs	1 LS	\$2,630	GOOD	LOW	N
Install New Glazing, Repaint Window Frames and Sash	40 SF, 40 SF	\$8,588	FAIR	LOW	N
Paint Miscellaneous	1 LS	\$2,630			N
STRUCTURAL					
Repair Existing Roof Structure	110 SF	\$9,201	GOOD	LOW	N
MECHANICAL					
Replace Tram Hoist	1 EA	\$21,000	POOR	SEVERE	Randy Ross to verify; \$16,200 is base cost (not installed)
HVAC - Increase Ventilation	832 SF	\$19,718	FAIR to POOR	MODERATE	N
ELECTRICAL					
Replace Branch Circuitry	832 SF	\$11,599	POOR	LOW	N
Ventilation - Existing PV System Expansion	832 SF	\$13,919	GOOD	MODERATE	N
Overcurrent Protection	1 LS	\$3,156	GOOD	MODERATE	N

\$168,669

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Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

SHED — Exterior Stabilization Only					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 LS	\$18,442		LOW	Y- revised hazmat \$, based on information/discussi on w hazmat consultant, after VA
Roof Removal and Replacement	444 SF	\$18,570	POOR	SEVERE	N
Install New Glazing, Repaint Window Frames and Sash	25 SF, 25 SF	\$5,367	POOR	MODERATE	N

\$42,379

Total for Michigan Island Pref Alt :	\$2,342,396
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APPENDIX A

OUTER ISLAND

OUTER ISLAND TOWER					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 LS	\$20,000 (assoc. paint)		MODERATE and LOW	N
Exterior Wall - Repoint/Seal Masonry	3,192 SF	\$64,549	FAIR to POOR	MODERATE	N
Install Handrails	17 LF	\$4,420	POOR	MODERATE	N
Patch Roof Rust	65 SF	\$751	FAIR	MODERATE	N
Paint, Roof and Trim	65 SF	\$2,253	FAIR to POOR	MODERATE	N
Paint, Exterior Siding and Trim	3,192 SF	\$23,053	FAIR to POOR	MODERATE	N
Install New Glazing; Reinstall Glazing in Windows; Repaint Frames and Sash	3 SF, 150 SF	\$10,506	GOOD	LOW	N
Paint Miscellaneous	1 LS	\$1,363			N
STRUCTURAL					
Monitor Existing Cracks	1 LS	\$5,451	GOOD	LOW	N
MECHANICAL					
HVAC - Increase Ventilation - Passive	95 SF	\$2,744	FAIR and POOR	MODERATE	N
ELECTRICAL					
Inspect/Replace Lighting Protection System	95 SF	\$2,196	FAIR to POOR	MODERATE	N

\$137,286

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Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

KEEPERS QUARTERS					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 LS	\$30,000 (assoc. paint)		MODERATE and LOW	Y - reduced, based on discussion w/ hazmat consultant, after VA
Exterior Wall - Repoint / Seal Masonry	2,204 SF	\$44,569	GOOD	MODERATE	N
Install Handrails	40 LF	\$10,400	POOR	LOW	N
Chimney Liner	37 SF	\$10,689	FAIR	LOW	N
Windows, Repaint Frames and Sash	216 SF	\$13,728	GOOD	MODERATE	N
Wood Flooring, Refinish Existing	1,779 SF	\$25,696	GOOD to FAIR	MODERATE	N
Paint, Roof & Trim	243 SF	\$2,457	GOOD	MODERATE	N
Paint, Soffit & Trim	339 SF	\$3,428	GOOD	LOW	N
Paint, Exterior Siding & Trim	224 SF	\$1,618	GOOD	LOW	N
Paint Miscellaneous	1 LS	\$5,451			N
MECHANICAL					
HVAC, Increase Ventilation	2,494 SF	\$61,241	FAIR	SEVERE (Chimney Liner); MODERATE (Ventilation/Piping)	N
ELECTRICAL					
Replace Lightning Protection System	1,222 SF	\$14,121	FAIR to POOR	MODERATE	N
Photovoltaic System (Ventilation)	2,494 SF	\$43,229	POOR	MODERATE	N

\$266,627

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APPENDIX A

FOG SIGNAL BUILDING					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 L S	\$20,000		MODERATE and LOW	N
Install Handrails	20 LF	\$5,200	POOR	LOW	N
Roofing, Repair Existing	1,290 LF	\$11,180	GOOD	LOW	N
Windows, Paint Frame & Sash	96 SF	\$6,101	FAIR	MODERATE	N
Paint, Soffit & Trim	333 SF	\$3,367	FAIR	LOW	N
Paint Stairs	1 FLT	\$2,889	GOOD to FAIR	LOW	N
Paint Miscellaneous	1 L S	\$2,725			N
STRUCTURAL					
Reinforce Existing Roof Structure	210 SF	\$7,280	GOOD	LOW	N
MECHANICAL					
Tram Hoist, Replace	1 EA	\$21,000	POOR	SEVERE	Randy Ross to verify; \$16,200 is base cost (not installed)

\$79,742

OIL STORAGE					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 L S	\$560		LOW	N
Exterior Wall - Repair & Repoint Brick	261 SF	\$7,540	FAIR	LOW	N

\$8,040

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Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

PRIVY					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 LS	\$1,000		LOW	N
Exterior Wall - Repair Brick	132 SF	\$3,813	FAIR	LOW	N
Roofing, Repair Existing	56 LF	\$485	FAIR to POOR	MODERATE	N
Windows, Paint Frame & Sash	3 SF	\$381	FAIR	LOW	N
Paint, Exterior Siding & Trim	135 SF	\$1,950	FAIR	LOW	N

\$7,629

Total for Outer Island	
Pref. Alt.:	\$499,324

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APPENDIX A

DEVILS ISLAND

DEVILS ISLAND LIGHT STATION TOWER					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 LS	\$52,600 (No lead soil mitigation)		MODERATE	refined hazmat \$
Install Handrails	42 elf	\$10,539	FAIR	MODERATE	N
Windows, New Glazing	150 LF	\$23,002	GOOD	MODERATE	N
Windows, Paint Frame & Sash	153 SF	\$9,385	GOOD to FAIR	MODERATE	N
Paint, Exterior Trim	1,794 SF	\$12,505	GOOD	MODERATE	N
Paint Roof Rust	94 SF	\$1,048	FAIR	SEVERE	N
Paint, Roof & Trim	94 SF	\$3,145	FAIR	SEVERE	N
Paint Miscellaneous	1 LS	\$1,315			N

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Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

STRUCTURAL					
Foundation, Repair Cracks	576 SF	\$32,120	POOR (stable portion)	UNKNOWN (evaluate further)	N
Additional Investigation, Allowance	1 L.S.	\$26,303			N
MECHANICAL					
HVAC - Increase Ventilation (Passive)	223 SF	\$3,109	FAIR	MODERATE	N
ELECTRICAL					
Inspect/Replace Lightning Protection System	223 SF	\$2,487	FAIR to POOR	MODERATE	N

\$177,558

KEEPERS QUARTERS					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 L.S.	\$50,000 (No lead soil mitigation)		MODERATE	N
Remove Floor Decking & Structure	66 SF	\$3,312	FAIR	MODERATE	N
Remove Roofing, Shingles	70 SF	\$1,171	GOOD to FAIR	LOW	N
Exterior Wall - Repoint Masonry	3,040 SF	\$59,332	GOOD	LOW	N
Roof Shingles, Wood	72 SF	\$3,212	GOOD to FAIR	LOW	N
Windows, Paint Frame & Sash	190 SF	\$11,655	FAIR to POOR	SEVERE	N
Paint, Soffit & Trim	432 SF	\$4,411	GOOD	LOW	N
STRUCTURAL					
Wood Floor Decking & Structure	66 SF	\$9,201	FAIR	MODERATE	N
MECHANICAL					
HVAC, Increase Ventilations	2,373 SF	\$56,239	FAIR	MODERATE	N
ELECTRICAL					
Inspect and Replace Lightning Protection System	921 SF	\$10,272	FAIR to POOR	MODERATE	N
Photovoltaic System (Ventilation)	2,373 SF	\$39,698	FAIR	MODERATE	N

\$248,903

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APPENDIX A

ASSISTANT KEEPERS QUARTERS					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 L S	\$50,000 (No lead soil mitigation)		MODERATE and LOW	Y - reduced, based on discussion w/ hazmat consultant, after VA
Exterior Wall - Repoint Masonry	86 SF	\$3,357	GOOD	MODERATE	N
Windows, Paint Frame & Sash	198 SF	\$12,145	GOOD to FAIR	MODERATE	N
Paint, Roof & Trim	1,198 SF	\$11,691	GOOD	LOW	N
Paint, Soffit & Trim	341 SF	\$3,328	FAIR	LOW	N
STRUCTURAL					
Wood Floor Decking & Structure	81 SF	\$1,292	FAIR	SEVERE	N - but this number has been reduced to reflect Park's role in the work
Floor Structure, Reinforce Existing	54 SF	\$5,270	FAIR	SEVERE	N
MECHANICAL					
HVAC, Increase Ventilation (Passive)	2,153 SF	\$30,015	FAIR to POOR	MODERATE	N
ELECTRICAL					
Inspect and Replace Lightning Protection System	262 SF	\$34,012	FAIR to POOR	MODERATE	N

\$141,110

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Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

FOG SIGNAL BUILDING					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 L.S.	\$20,000 (No lead soil mitigation)		MODERATE	Y - reduced, based on discussion w hazmat consultant, after VA
Exterior Wall - Repoint Masonry	126 SF	\$4,918	GOOD	LOW	N
Exterior Wall - Repair Existing	200 SF	\$5,576	GOOD (shingles); POOR (foundation brick)	LOW	N
Roofing, Repair Existing	1,222 SF	\$10,221	GOOD to FAIR	LOW	N
Windows, Paint Frame & Sash	108 SF	\$6,625	FAIR to POOR	MODERATE	N
Paint, Roof & Trim	1,222 SF	\$10,221	GOOD	LOW	N

\$57,561

BOATHOUSE					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 L.S.	\$5,000 (No lead soil mitigation)			N
Exterior Wall - Repair Existing	1,070 SF	\$14,917	GOOD to FAIR	LOW	N

\$19,917

Total for Devils Island Pref. Alt.:	\$644,649
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APPENDIX A

LONG ISLAND

TRIPLEX					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Rehabilitation per Park Decision		\$92,295			Y - per Park discussions
Recreaf		\$57,705			

\$150,000

Total for Long Island Pref. Alt.:	\$150,000
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Appendix A: Class C Cost Estimate and Phasing for
the Preferred Alternative

SAND ISLAND

SAND ISLAND SITE					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
SITE/CULTURAL LANDSCAPE					
Site Clearing	1 ACRE	\$8,680	POOR	SEVERE	N
Site Circulation/ Accessibility	1 LS	\$20,592 (Accessible boardwalk not included)	FAIR	MODERATE	N
					\$29,272

SAND ISLAND LIGHT STATION QUARTERS					
	Quantity	Total Net	CLR/HSR Report Condition	CLR/HSR Report Priority	Change from 2010.12.16 VA?
ARCHITECTURAL					
Hazmat Mitigation: Asbestos, lead containing paint, lead dust, lead in soils, and mold were identified or assumed to be present.	1 LS	\$100,000 (No lead soil mitigation)		MODERATE	
Repair or Remove Finishes	2,132 SF	\$14,861	GOOD to FAIR to POOR	MODERATE	
Wood Ramp, ADA	16 SF	\$5,576	POOR	MODERATE	
Install Handrails	42 L F	\$10,539	GOOD to FAIR	SEVERE	
Millwork, Refinish Existing	15 LF	\$6,273	GOOD to FAIR to POOR	LOW	
Windows, Paint Frame & Sash	314 SF	\$13,132	GOOD to FAIR	MODERATE	
Door, Refinish & Replace Hardware - Existing	17 LEAF	\$33,179	GOOD	MODERATE	

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APPENDIX A

Rain gutter & Downspouts	156 LF	\$19,573	POOR	SEVERE	
Wood Flooring, Refinish Existing	1,384 SF	\$19,294	GOOD to FAIR to POOR	LOW	
Flooring, Repair Existing	192 SF	\$1,606	GOOD to FAIR to POOR	LOW	
Paint & Repair Plaster, Interior Wall & Ceiling	3,078 SF	\$34,328	GOOD to FAIR to POOR	MODERATE	
Paint, Stairs	1 FLT	\$2,788	GOOD to FAIR	MODERATE	
Paint Miscellaneous	1 LS	\$5,261			
STRUCTURAL					
Floor Sheathing	99 SF	\$1,656	GOOD	LOW	
Floor Structure, Reinforce Existing	96 SF	\$9,368	GOOD	LOW	
Roof Structure, Reinforce Existing	272 SF	\$15,168	UNKNOWN	UNKNOWN (evaluate further)	
MECHANICAL					
Remove Piping	20 LF	\$1,115	FAIR to POOR	MODERATE	
Cistern - Clean, Paint & Seal Existing	1 EA	\$13,941	FAIR to POOR	MODERATE	
HVAC - Increase Ventilation	2,132 SF	\$50,527	GOOD	MODERATE	
ELECTRICAL					
Replace Lightning Protection System	2,132 SF	\$23,777	POOR	LOW	
Photovoltaic System (Ventilation)	2,132 SF	\$35,666	FAIR	MODERATE	
Overcurrent Protection	1 LS	\$6,576	N/A	MODERATE	

\$424,204

Total for Sand Island Pref. Alt.:	\$453,475
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PREFERRED ALTERNATIVE TOTAL:	\$4,089,845
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1 **APPENDIX B: ACCESSIBILITY PLAN FOR RASPBERRY, MICHIGAN, OUTER,**
2 **DEVILS, LONG AND SAND ISLANDS, JUNE 8-10, 2010**

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