

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate

BASIS OF ESTIMATE

PROJECT INFORMATION

Project: Oso Comida Trailhead Improvements
Park: Bear Arbor NRA
Park Alpha: BEAR
PMIS: XXXXXX
Estimate Date: 12/16/2010
Prepared By: YtB
Company: NPS Bear Arbor NRA
Address: 123 Bruin Meadows Rd.
City, State Zip: Grizzley Hollow, CA 96023
Phone: (555) 123-4567

BACKGROUND SUPPORTING MATERIAL (Scope of Work):

CBA Meeting meeting minutes and revisions to preferred alternative SD plans. The preferred alternative replaced the previously programmed vault toilets with a wet comfort station and septic system in response to a request by the Friends of Bruin Meadows group offer to fund an additional \$700k for the upgrade. The Scope of Work for the project now includes: Remove existing pit toilets; construct new Comfort Station, Septic system: 50 space paved parking area; Rehabilitate picnic area; Trail connection improvements; and fencing. The septic system incorporates a new technology in-tank sanitary treatment process that will be pre ordered and supplied by NPS as GFP. Purchase cost of tank and treatment materials is included in direct cost estimate.

SOURCE OF COST DATA:

Majority of costs are based on RS Means 2010 Assemblies Cost Data, 35th Annual Edition and 2010 Facilities Construction Cost Data (FCCD), 25th Annual Edition. Parking lot costs are based on actual, in-park FHWA road project on Bruin Meadows Road adjacent to site - adjusted down by -23% to remove remoteness, location & wage factors. Purchase price for the prefabricated Septic-King™ is an actual vendor quote FOB park warehouse. **WHENEVER RSMEANS BARE UNIT COSTS WERE USED FROM THE FCCD DATA, 10% WAS ADDED TO MATERIALS & EQUIPMENT AND 60% TO LABOR TO ACCOUNT FOR INSTALLER (Subcontractor) O&P**

ESTIMATE ASSUMPTIONS:

Estimate assumes that all improvements will be constructed as a single project during one construction season. East half of existing dirt parking area and trailhead will remain in operation until new paved lot and walk connections are completed. 2nd half of existing lot will be available for contractor laydown/equipment area, but contractor's labor force must park at maintenance yard 5 miles away and be shuttled into site. Shuttle costs and additional portable toilet cost impacts are included in Government Special Conditions. Septic-King™ system will be preordered by the Park to avoid long lead time from impacting installation schedule. Water for comfort station is assumed to be available from waterline in Bruin Meadows Road

MAJOR CHANGES FROM PREVIOUS ESTIMATE:

Previously programmed precast vault toilets have been replaced with a full service wet comfort station. Trail connection to Bruin Meadows overlook has been changed to integrally colored PCC Sidewalk for the entire 650' length. Three rail channelizing fence has been changed to single-rail seat-resistant wood rail.

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate

BASIS OF ESTIMATE

PROJECT INFORMATION

Project: Oso Comida Trailhead Improvements
Park: Bear Arbor NRA
Park Alpha: BEAR
PMIS: XXXXXX
Estimate Date: 12/16/2010

DESCRIPTION OF MARK-UP & ADD-ONS:

Location Factor:	<u>6.30%</u>	Closest RS Means market Center is Redding CA; CCI=106.3
Remoteness Factor:	<u>13.0%</u>	Site is 130 miles from published commercial center. Good state highway access to site. Minor traffic impacts.
Wage Rate Factor:	<u>3.70%</u>	Compared local county Davis-Bacon wage rates to location adjusted RS Means wages for the trades anticipated.
State & Local Taxes:	<u>8.25%</u>	6% State Sales Tax plus 2.25% county and regional transportation district taxes. See Comment Below
Design Contingency:	<u>15.0%</u>	SD documents have few details. Scope of work is simple but since not defined in detail 15% is included for future changes
Standard. General Conditions:	<u>12.0%</u>	Relatively simple heavy/civil construction project, but the addition of wet comfort station, will increase job-site indirects from previous 10%
Government General Conditions:	<u>12.0%</u>	Higher than normal; Includes impacts associated with shuttling crews and maintaining public access to existing trail.
Historic Preservation Factor:	<u>3.00%</u>	Project is adjacent to a historical bridge and several cultural sites that will require protection/modification to plan.
Contractor Overhead:	<u>8.50%</u>	Normal mid-range for Small to medium sized Heavy/Civil contractor in this area
Contractor Profit:	<u>10.0%</u>	Economic downturn is easing and we anticipate modest increase in contractor profit by 2013 project date
Bonds and Permits:	<u>2.00%</u>	Standard to high range for low volume but established Heavy/Civil contractors. 0.5% added for building.
Contracting Method Adjustment:	<u>15.0%</u>	Preliminary indications are that negotiated sole-source SBA Section 8a or SDV procurement will be utilized.
Annual Inflation Escalation Factor:	<u>3.60%</u>	Anticipate easing of economic downturn will trigger mild inflation
Time Until Project Midpoint (Months)	<u>44</u>	RS Means data date of January 2010 until August 2013.

OTHER COMMENTS:

Grading plan is not complete, so quantities used are best estimate of typical costs for this type of construction. Since new comfort station will have deepened grade-beam/strip footing on piers w/PT slab on grade construction insufficient spoils will be generated to backfill existing pits. Assumed 100% import from NPS in park-stockpile.

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate
PROJECT COST SUMMARY

Project: Oso Comida Trailhead Improvements
Park: Bear Arbor NRA
Park Alpha: BEAR
PMIS Number: XXXXXX

Estimate By: YtB
Date: 12/16/10

Reviewed By: BBB
Date: 12/20/10

Asset / Project Element	Size/Count	Units
Trailhead with Comfort Station	1000	SF

Item No.	WBS	Description	Material Cost/Unit	Total Material Cost	Installation Cost/Unit	Total Install Cost	Direct Cost/Unit	Total Direct Costs	NET Cost/Unit	Total NET Costs
1	A10	Foundations	\$ 22.08	\$ 22,080	\$ 13.02	\$ 13,017	\$ 35.10	\$ 35,097	\$ 95.18	\$ 95,183
2	A20	Basement Construction	\$ 7.60	\$ 7,596	\$ 10.18	\$ 10,175	\$ 17.77	\$ 17,772	\$ 48.20	\$ 48,197
3	B10	Superstructure	\$ 6.56	\$ 6,564	\$ 4.70	\$ 4,699	\$ 11.26	\$ 11,263	\$ 30.55	\$ 30,546
4	B20	Exterior Enclosure	\$ 33.47	\$ 33,468	\$ 24.88	\$ 24,880	\$ 58.35	\$ 58,348	\$ 158.24	\$ 158,241
5	B30	Roofing	\$ 12.82	\$ 12,819	\$ 6.09	\$ 6,090	\$ 18.91	\$ 18,909	\$ 51.28	\$ 51,282
6	C10	Interior Construction	\$ 23.36	\$ 23,358	\$ 7.51	\$ 7,509	\$ 30.87	\$ 30,867	\$ 83.71	\$ 83,711
7	C20	Stairs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	C30	Interior Finishes	\$ 3.43	\$ 3,429	\$ 10.91	\$ 10,912	\$ 14.34	\$ 14,341	\$ 38.89	\$ 38,893
9	D10	Conveying Systems	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	D20	Plumbing Systems	\$ 21.36	\$ 21,359	\$ 12.36	\$ 12,364	\$ 33.72	\$ 33,723	\$ 91.46	\$ 91,457
11	D30	HVAC	\$ 1.50	\$ 1,500	\$ 0.50	\$ 500	\$ 2.00	\$ 2,000	\$ 5.42	\$ 5,424
12	D40	Fire Protection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	D50	Electrical	\$ 22.23	\$ 22,227	\$ 21.67	\$ 21,665	\$ 43.89	\$ 43,892	\$ 119.04	\$ 119,036
14	E10	Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	E20	Furnishings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	F10	Special Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	F20	Selective Building Demolition	\$ 1.14	\$ 1,138	\$ 4.74	\$ 4,737	\$ 5.87	\$ 5,875	\$ 15.93	\$ 15,933
18	G10	Site Preparation	\$ 6.19	\$ 6,188	\$ 36.69	\$ 36,692	\$ 42.88	\$ 42,880	\$ 116.29	\$ 116,290
19	G20	Site Improvements	\$ 160.08	\$ 160,075	\$ 101.61	\$ 101,610	\$ 261.68	\$ 261,685	\$ 709.69	\$ 709,691
20	G30	Site Mechanical Utilities	\$ 60.00	\$ 60,000	\$ 14.00	\$ 14,000	\$ 74.00	\$ 74,000	\$ 200.69	\$ 200,689
21	G40	Site Electrical Utilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	G50	Other Site Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Direct Construction Costs			\$ 381.80	\$ 381,800	\$ 268.85	\$ 268,851	\$ 650.65	\$ 650,651	\$ 1,764.57	\$ 1,764,571
Total Value of Government Furnished Property (GFP) Included in Direct Costs				\$46,000.00		\$ -	\$ 46,000	\$ 46,000	In most cases GFP is normally zero - see footnote-	
Direct Cost Subtotal without GFP				\$ 335,800		\$ 268,851		\$ 604,651		
Published Location Factor			6.30%					\$38,093	Notes & Comments: Building only direct cost = \$294.32/sf. Building total NET cost = \$794.17/sf GFP Septic King Treatment System Pre-Purchased by Government = \$46,000	
Remoteness Factor			13.00%					\$78,605		
Federal Wage Rate Factor			3.70%		Generally applied against Labor Costs only.			\$9,947		
State & Local Taxes			8.25%		Generally applied against Material Costs only, less GFP. Please Note if application differs.			\$27,704		
Design Contingency			15.00%					\$90,698		
Total Direct Construction Costs								\$895,697		
Standard General Conditions			12.00%		Applied to Total Direct Construction Cost less GFP			\$101,964		
Government General Conditions			12.00%		Applied to Total Direct Construction Cost less GFP			\$101,964		
Historic Preservation Factor			3.00%		Applied to Total Direct Construction Cost less GFP			\$25,491		
Subtotal NET Construction Cost								\$1,125,115		
Overhead			8.50%					\$91,725		
Profit			10.00%					\$107,911		
Estimated NET Construction Cost								\$1,324,751		
Bonds & Permits			2.00%					\$26,495		
Contracting Method Adjustment			15.00%					\$198,713		
Inflation Escalation			44	Months	Annual Rate =	3.60%	Inc. Bonds & CMA	\$214,613		
Total Estimated NET Cost of Construction								\$1,764,571		

GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **A10 Foundations**

Total Cost: **\$35,097**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
A1010	STANDARD FOUNDATIONS								
A1010 110-2500	RS Means Assembly A1010-110-2500	140	LF	\$ 14.55	\$2,037	\$ 22.50	\$3,150	\$ 37.05	\$5,187
	Furnish & Install 2" EPS insulation Board	560	SF	\$ 0.80	\$448	\$ 0.45	\$252	\$ 1.25	\$700
	Plus Crushable Void-form	140	LF	\$ 1.75	\$245	\$ 0.25	\$35	\$ 2.00	\$280
	Installer overhead & Profit included in Assembly			\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	STANDARD FOUNDATIONS	1000	SF	\$ 2.73	\$2,730	\$ 3.44	\$3,437	\$ 6.17	\$6,167

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
A1020	SPECIAL FOUNDATIONS								
A1020 110-2220	Drilled caissons 10 ea x 25' long	16	EA	\$ 920.00	\$14,720	\$ 375.00	\$6,000	\$ 1,295.00	\$20,720
	Less steel shell, plus #4 rebar cage			\$ (35.00)	\$0	\$ (42.00)	\$0	\$ (77.00)	\$0
	Installer overhead & Profit included in Assembly			\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	SPECIAL FOUNDATIONS	1000	SF	\$ 14.72	\$14,720	\$ 6.00	\$6,000	\$ 20.72	\$20,720

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
A1030	SLAB ON GRADE - Includes 10' porch on both ends								
A1030 120-4460	6" Slab on grade, trowel finish, no reinforcing	1000	SF	\$ 2.61	\$2,610	\$ 2.46	\$2,460	\$ 5.07	\$5,070
03 23 05.50-3100	Pre-stressing tendon in place	1000	SF	\$ 0.57	\$570	\$ 0.42	\$420	\$ 0.99	\$990
03 23 05.50-3105	Post tentioning after cure	1000	SF	\$ -	\$0	\$ 0.35	\$350	\$ 0.35	\$350
	Plus sand, rigid unsulation & Void-form	1000	SF	\$ 1.45	\$1,450	\$ 0.35	\$350	\$ 1.80	\$1,800
	Installer overhead & Profit included in Assembly			\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	ends	1000	SF	\$ 4.63	\$4,630	\$ 3.58	\$3,580	\$ 8.21	\$8,210

Summary Item **A10 Foundations**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
A10	Foundations	1000	SF	\$ 22.08	\$22,080	\$ 13.02	\$13,017	\$ 35.10	\$35,097

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **A20 Basement Construction**

Total Cost: \$0

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
A2020	BASEMENT WALLS								
A2020 110-1520	48" x 8" Slab Edge Stem Wall w/reinforcing	140	LF	\$ 16.10	\$2,254	\$ 47.00	\$6,580	\$ 63.10	\$8,834
A2020 110-2240	Excavation & Backfill Foundation	560	SF	\$ 8.75	\$4,900	\$ 5.80	\$3,248	\$ 14.55	\$8,148
	dirt stockpile offsite, imported backfill			\$ -	\$0	\$ -	\$0	\$ -	\$0
	Rigid wall insulation	560	SF	\$ 0.79	\$442	\$ 0.62	\$347	\$ 1.41	\$790
SUBTOTAL	BASEMENT WALLS	1000	SF	\$ 7.60	\$7,596	\$ 10.18	\$10,175	\$ 17.77	\$17,772

Summary Item **A20 Basement Construction**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
A20	Basement Construction	1000	SF	\$ 7.60	\$7,596	\$ 10.18	\$10,175	\$ 17.77	\$17,772

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/17/10

Summary Item **B10 Superstructure**

Total Cost: \$11,263

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
B1020	ROOF CONSTRUCTION - Includes 10' porch cover on both ends								
06 17 53.10-0300	Furnish & Install Wood Trusses 30' span	1750	SF	\$ 2.55	\$4,463	\$ 1.15	\$2,013	\$ 3.70	\$6,475
06 16 36.10-0103	1/2" cdx Plywood sheathing	1960	SF	\$ 0.46	\$902	\$ 0.65	\$1,274	\$ 1.11	\$2,176
	Misc. tie-downs,brackets & hardware allowance	1750	SF	\$ 0.20	\$350	\$ 0.35	\$613	\$ 0.55	\$963
	Heavy Timber Posts & Beams on porches	1	Allow	\$ 350.00	\$350	\$ 300.00	\$300	\$ 650.00	\$650
	Park-specific detailing allowance	1	Allow	\$ 500.00	\$500	\$ 500.00	\$500	\$ 1,000.00	\$1,000
				\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	cover on both ends	1000	SF	\$ 6.56	\$6,564	\$ 4.70	\$4,699	\$ 11.26	\$11,263

Summary Item **B10 Superstructure**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
B10	Superstructure	1000	SF	\$ 6.56	\$6,564	\$ 4.70	\$4,699	\$ 11.26	\$11,263

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **B20 Exterior Enclosure**

Total Cost: \$58,348

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
B2010	EXTERIOR WALLS								
B2010 148-3400	8'-2x6 studwall, 16" O.C., w/R-21 insulation, 1/2" CDX, poly-wrap - Standard Assembly	1120	SF	\$ 3.56	\$3,987	\$ 5.40	\$6,048	\$ 8.96	\$10,035
	Less Exterior siding	1120	SF	\$ (1.51)	-\$1,691	\$ (1.52)	-\$1,702	\$ (3.03)	-\$3,394
04 43 10.05-0700	Stone Wainscot	560	SF	\$ 16.50	\$9,240	\$ 20.56	\$11,514	\$ 37.06	\$20,754
07 46 23.10-4100	Vertical B&B Rough Sawn Cedar Siding	450	SF	\$ 4.35	\$1,955	\$ 1.26	\$569	\$ 5.61	\$2,524
	Sustainability Upgrade	1120	SF	\$ 1.00	\$1,120	\$ 0.65	\$728	\$ 1.65	\$1,848
	Architectural upgrade allowance	1	Allow	\$ 2,500.00	\$2,500	\$ 2,500.00	\$2,500	\$ 5,000.00	\$5,000
	Privacy Screen End Panels - Allowance	320	SF	\$ 5.50	\$1,760	\$ 2.75	\$880	\$ 8.25	\$2,640
				\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	EXTERIOR WALLS	1000	SF	\$ 18.87	\$18,871	\$ 20.54	\$20,536	\$ 39.41	\$39,407

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
B2020	EXTERIOR WINDOWS								
B2020 102-3700	Wood Awning Windows, 34"x22", Dbl. pane, extra width sill, pre-finished custom color	16	EA	\$ 272.00	\$4,352	\$ 129.00	\$2,064	\$ 401.00	\$6,416
	Energy Upgrade	16	EA	\$ 30.00	\$480	\$ 5.00	\$80	\$ 35.00	\$560
	metal Cladding custom color upgrade	16		\$ 40.00	\$640	\$ 15.00	\$240	\$ 55.00	\$880
SUBTOTAL	EXTERIOR WINDOWS	1000	SF	\$ 5.47	\$5,472	\$ 2.38	\$2,384	\$ 7.86	\$7,856

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **B20 Exterior Enclosure**

Total Cost: \$58,348

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
B2030	EXTERIOR DOORS								
B2030 220-3950	Insulated Steel Door Assy. w/ 5-3/4" steel frame, lockset, hardware, pre-finished custom color, installed and adjusted	5	EA	\$ 1,600.00	\$8,000	\$ 350.00	\$1,750	\$ 1,950.00	\$9,750
	140Add Automatic Hydraulic Closer	5	Unit	\$ 225.00	\$1,125	\$ 42.00	\$210	\$ 267.00	\$1,335
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	EXTERIOR DOORS	1000	SF	\$ 9.13	\$9,125	\$ 1.96	\$1,960	\$ 11.09	\$11,085

Summary Item **B20 Exterior Enclosure**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
B20	Exterior Enclosure	1000	SF	\$ 33.47	\$33,468	\$ 24.88	\$24,880	\$ 58.35	\$58,348

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **B30 Roofing**

Total Cost: \$18,909

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
B3010	ROOF COVERINGS								
07 41 13.20-0720	22 Ga. Raised seam steel roof - standard finish	1960	SF	\$ 6.11	\$11,966	\$ 2.41	\$4,722	\$ 8.51	\$16,687
07 41 13.20 - 1200	Roof Ridge Cap	70	LF	\$ 3.50	\$245	\$ 2.71	\$189	\$ 6.20	\$434
B301 430-	Misc. Fashings, Roof penetrations, boots hardware, etc.	1	LS	\$ 250.00	\$250	\$ 300.00	\$300	\$ 550.00	\$550
B3010 610-1200	5" Galvanized Gutters	140	LF	\$ 1.75	\$245	\$ 4.96	\$694	\$ 6.71	\$939
B3010 620-0200	Rectangular Downspouts	56	LF	\$ 2.02	\$113	\$ 3.30	\$185	\$ 5.32	\$298
SUBTOTAL	ROOF COVERINGS	1000	SF	\$ 12.82	\$12,819	\$ 6.09	\$6,090	\$ 18.91	\$18,909

Summary Item **B30 Roofing**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
B30	Roofing	1000	SF	\$ 12.82	\$12,819	\$ 6.09	\$6,090	\$ 18.91	\$18,909

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **C10 Interior Construction**

Total Cost: **\$30,867**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
C1010	INTERIOR PARTITIONS								
C1010 124-2602	Interior wet wall partitions	500	SF	\$ 1.88	\$940	\$ 4.18	\$2,090	\$ 6.06	\$3,030
C1010 128-0840	5/8" WR drywall on inside of exterior walls	1440	SF	\$ 0.47	\$677	\$ 0.55	\$792	\$ 1.02	\$1,469
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	INTERIOR PARTITIONS	1000	SF	\$ 1.62	\$1,617	\$ 2.88	\$2,882	\$ 4.50	\$4,499

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
C1030	FITTINGS								
C1030 110-0600	Toilet Partitions F&C dual hung, Stainless Steel	5	EA	\$ 1,675.00	\$8,375	\$ 205.00	\$1,025	\$ 1,880.00	\$9,400
C1030 110-0620	Handicap addition	2	EA	\$ 315.00	\$630	\$ -	\$0	\$ 315.00	\$630
C1030 110-1140	Entrance Screens	4	EA	\$ 985.00	\$3,940	\$ 68.50	\$274	\$ 1,053.50	\$4,214
C1030 110-1380	Urinal Screens, Floor mounted, Stainless Steel	4	EA	\$ 630.00	\$2,520	\$ 128.00	\$512	\$ 758.00	\$3,032
C1030 830-0170	Vanity Counter	16	LF	\$ 236.00	\$3,776	\$ 51.00	\$816	\$ 287.00	\$4,592
C1030 710-	Bathroom Accessories Allowance	1	Allow	\$ 2,500.00	\$2,500	\$ 2,000.00	\$2,000	\$ 4,500.00	\$4,500
SUBTOTAL	FITTINGS	1000	SF	\$ 21.74	\$21,741	\$ 4.63	\$4,627	\$ 26.37	\$26,368

Summary Item **C10 Interior Construction**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
C10	Interior Construction	1000	SF	\$ 23.36	\$23,358	\$ 7.51	\$7,509	\$ 30.87	\$30,867

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **C30 Interior Finishes**

Total Cost: \$14,341

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
C3010	WALL FINISHES								
C3020 230-1080	Epoxy wall Coating	1600	SF	\$ 1.06	\$1,696	\$ 2.98	\$4,768	\$ 4.04	\$6,464
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	WALL FINISHES	1000	SF	\$ 1.70	\$1,696	\$ 4.77	\$4,768	\$ 6.46	\$6,464

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
C3020	FLOOR FINISHES								
03 35 29.3-4050	2 Coat Epoxy Floor Finish	1000	SF	\$ 0.25	\$253	\$ 0.70	\$704	\$ 0.96	\$957
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	FLOOR FINISHES	1000	SF	\$ 0.25	\$253	\$ 0.70	\$704	\$ 0.96	\$957

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **C30 Interior Finishes**

Total Cost: \$14,341

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
C3030	CEILING FINISHES								
C3030 105 2400	2-coat Gypsum Drywall on Furring painted	1000	SF	\$ 1.48	\$1,480	\$ 5.44	\$5,440	\$ 6.92	\$6,920
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	CEILING FINISHES	1000	SF	\$ 1.48	\$1,480	\$ 5.44	\$5,440	\$ 6.92	\$6,920

Summary Item **C30 Interior Finishes**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
C30	Interior Finishes	1000	SF	\$ 3.43	\$3,429	\$ 10.91	\$10,912	\$ 14.34	\$14,341

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
Park: Bear Arbor NRA
Park Alpha: BEAR
PMIS Number: XXXXXX

Estimate By: YtB
Date: 12/16/10
Reviewed By: BBB
Date: 12/20/10

Summary Item **D20 Plumbing Systems**

Total Cost: **\$33,723**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D2010	PLUMBING FIXTURES								
D2010 120-1760	Water Closets, Battery Mount, Wall hung, SxS, 1st	2	Ea	\$ 1,500.00	\$3,000	\$ 775.00	\$1,550	\$ 2,275.00	\$4,550
D2010 120-1800	Additional Closet Sets	3	Ea	\$ 1,425.00	\$4,275	\$ 730.00	\$2,190	\$ 2,155.00	\$6,465
D2010 210-2000	Wall hung Urinals	2	Ea	\$ 565.00	\$1,130	\$ 745.00	\$1,490	\$ 1,310.00	\$2,620
D 2010 310-1760	Stainless Steel sinks, Self Rimming	5	EA	\$ 660.00	\$3,300	\$ 665.00	\$3,325	\$ 1,325.00	\$6,625
ADA Upgrade	Accessibility Upgrade	5	Ea	\$ 50.00	\$250	\$ 55.00	\$275	\$ 105.00	\$525
D2010 440-4260	Floor Sevice Sink Complete	1	Unit	\$ 1,580.00	\$1,580	\$ 940.00	\$940	\$ 2,520.00	\$2,520
Allowance	NPS sustainablity & durability upgrade	1	Allow	\$ 3,383.75	\$3,384	\$ 169.19	\$169	\$ 3,552.94	\$3,553
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	PLUMBING FIXTURES	1000	SF	\$ 16.92	\$16,919	\$ 9.94	\$9,939	\$ 26.86	\$26,858

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D2020	DOMESTIC WATER DISTRIBUTION								
D220	Additional Rough In piping Allowance	1	Allow	\$ 1,250.00	\$1,250	\$ 500.00	\$500	\$ 1,750.00	\$1,750
D220 250-1780	Gas Water Heater Assembly	1	Ea	\$ 2,690.00	\$2,690	\$ 1,675.00	\$1,675	\$ 4,365.00	\$4,365
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	DOMESTIC WATER DISTRIBUTION	1000	SF	\$ 3.94	\$3,940	\$ 2.18	\$2,175	\$ 6.12	\$6,115

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item D20 Plumbing Systems

Total Cost: \$33,723

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D2030	SANITARY WASTE								
D2030	Additional Waste piping allowance	1	Allow	\$ 500.00	\$500	\$ 250.00	\$250	\$ 750.00	\$750
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	SANITARY WASTE	1000	SF	\$ 0.50	\$500	\$ 0.25	\$250	\$ 0.75	\$750

Summary Item D20 Plumbing Systems

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D20	Plumbing Systems	1000	SF	\$ 21.36	\$21,359	\$ 12.36	\$12,364	\$ 33.72	\$33,723

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **D30 HVAC**

Total Cost: **\$2,000**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D3040	DISTRIBUTION SYSTEMS (HVAC)								
D3040 -Allow	Summer Ventilaiton system	1	Allow	\$ 1,500.00	\$1,500	\$ 500.00	\$500	\$ 2,000.00	\$2,000
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	DISTRIBUTION SYSTEMS (HVAC)	1000	SF	\$ 1.50	\$1,500	\$ 0.50	\$500	\$ 2.00	\$2,000

Summary Item **D30 HVAC**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D30	HVAC	1000	SF	\$ 1.50	\$1,500	\$ 0.50	\$500	\$ 2.00	\$2,000

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
Park: Bear Arbor NRA
Park Alpha: BEAR
PMIS Number: XXXXXX

Estimate By: YtB
Date: 12/16/10
Reviewed By: BBB
Date: 12/20/10

Summary Item **D50 Electrical**

Total Cost: \$43,892

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D5010	ELECTRICAL SERVICE & DISTRIBUTION								
D5050 120-0620	1phz. 200 Amp, 120/208V, Service Panel & feeders	1	EA	\$ 1,100.00	\$1,100	\$ 1,425.00	\$1,425	\$ 2,525.00	\$2,525
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	ELECTRICAL SERVICE & DISTRIBUTION	1000	SF	\$ 1.10	\$1,100	\$ 1.43	\$1,425	\$ 2.53	\$2,525

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D5020	LIGHTING & BRANCH WIRING								
D5020 210-0520	Energy Saving Fluorescent lighting	800	SF	\$ 1.76	\$1,408	\$ 3.37	\$2,696	\$ 5.13	\$4,104
D5020 216-0200	Utility Chase lighting	200	SF	\$ 1.02	\$204	\$ 1.37	\$274	\$ 2.39	\$478
D5020 120-0760	Receptacles	800	SF	\$ 0.60	\$480	\$ 2.16	\$1,728	\$ 2.76	\$2,208
D5020 120-0800	Switches	800	SF	\$ 0.20	\$160	\$ 0.64	\$512	\$ 0.84	\$672
D5020 145 0360	230V wiring to septic system	1	EA	\$ 675.00	\$675	\$ 900.00	\$900	\$ 1,575.00	\$1,575
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	LIGHTING & BRANCH WIRING	1000	SF	\$ 2.93	\$2,927	\$ 6.11	\$6,110	\$ 9.04	\$9,037

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D5040	SPECIAL ELECTRICAL SYSTEMS								
D5040 420-0100	PV System Allowance	3000	Watt	\$ 5.25	\$15,750	\$ 3.75	\$11,250	\$ 9.00	\$27,000
D5040 420-1050	Battery Storage	0	EA	\$ 850.00	\$0	\$ 300.00	\$0	\$ 1,150.00	\$0
Misc.	Misc. Installation Costs	1	LS	\$ 1,200.00	\$1,200	\$ 500.00	\$500	\$ 1,700.00	\$1,700
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	SPECIAL ELECTRICAL SYSTEMS	1000	SF	\$ 16.95	\$16,950	\$ 11.75	\$11,750	\$ 28.70	\$28,700

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **D50 Electrical**

Total Cost: \$43,892

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D5090	OTHER ELECTRICAL SYSTEMS								
D5090 510-1000	Baseboard Heat for shoulder season only	1000	SF	\$ 1.25	\$1,250	\$ 2.38	\$2,380	\$ 3.63	\$3,630
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	OTHER ELECTRICAL SYSTEMS	1000	SF	\$ 1.25	\$1,250	\$ 2.38	\$2,380	\$ 3.63	\$3,630

Summary Item **D50 Electrical**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
D50	Electrical	1000	SF	\$ 22.23	\$22,227	\$ 21.67	\$21,665	\$ 43.89	\$43,892

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **F20 Selective Building Demolition**

Total Cost: \$5,875

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
F2010	BUILDING ELEMENTS DEMOLITION								
Optional Code	Demo structures- haul to dump; Means Crew B-30	1	Day	\$ -	\$0	\$ 3,987.86	\$3,988	\$ 3,987.86	\$3,988
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	BUILDING ELEMENTS DEMOLITION	1000	SF	\$ 0.70	\$700	\$ 3.99	\$3,988	\$ 4.69	\$4,688

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
F2020	HAZARDOUS COMPONENTS ABATEMENT								
Optional Code	Pump & Flush existing pits	1	LS	\$ -	\$0	\$ 500.00	\$500	\$ 500.00	\$500
Optional Code	Import, Backfill & hand compact pits	50	CY	\$ 8.75	\$438	\$ 4.99	\$250	\$ 13.74	\$687
Optional Code	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	HAZARDOUS COMPONENTS ABATEMENT	1000	SF	\$ 0.44	\$438	\$ 0.75	\$750	\$ 1.19	\$1,187

Summary Item **F20 Selective Building Demolition**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
F20	Selective Building Demolition	1000	SF	\$ 1.14	\$1,138	\$ 4.74	\$4,737	\$ 5.87	\$5,875

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **G10 Site Preparation**

Total Cost: \$42,880

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G1010	SITE CLEARING								
	Erosion Control	1	Allow	\$ 4,000.00	\$4,000	\$ 2,500.00	\$2,500	\$ 6,500.00	\$6,500
	Clear & Grub Parking Area	40000	SF	\$ -	\$0	\$ 0.25	\$10,000	\$ 0.25	\$10,000
	Selective Tree Removal	10	EA	\$ -	\$0	\$ 350.00	\$3,500	\$ 350.00	\$3,500
	Misc. Site Clearing	1	LS	\$ -	\$0	\$ 2,500.00	\$2,500	\$ 2,500.00	\$2,500
	Hand Clear New Trail Alignment	500	LF	\$ -	\$0	\$ 5.00	\$2,500	\$ 5.00	\$2,500
	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	SITE CLEARING	1000	SF	\$ 4.00	\$4,000	\$ 21.00	\$21,000	\$ 25.00	\$25,000

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G1020	SITE DEMOLITION & RELOCATIONS								
	Misc. site Demolition	1	LS	\$ -	\$0	\$ 1,500.00	\$1,500	\$ 1,500.00	\$1,500
	Remove Existing Picnic Tables & Grills	1	LS	\$ -	\$0	\$ 2,500.00	\$2,500	\$ 2,500.00	\$2,500
	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	SITE DEMOLITION & RELOCATIONS	1000	SF	\$ -	\$0	\$ 4.00	\$4,000	\$ 4.00	\$4,000

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **G10 Site Preparation**

Total Cost: \$42,880

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G1030	SITE EARTHWORK								
	Imported fill for building Pad	250	CY	\$ 8.75	\$2,188	\$ 4.99	\$1,248	\$ 13.74	\$3,435
	Onsite Cut to fill	1500	CY	\$ -	\$0	\$ 3.81	\$5,715	\$ 3.81	\$5,715
	Fine Grade Building Pad	2000	SF	\$ -	\$0	\$ 0.25	\$500	\$ 0.25	\$500
	Clean-up and Fine Grade around Building	5000	SF	\$ -	\$0	\$ 0.15	\$750	\$ 0.15	\$750
	Backfill & Compact existing pits	50	CY	\$ -	\$0	\$ 4.99	\$250	\$ 4.99	\$250
	Fine Grade & Compact Picnic subgrades	3500	SF	\$ -	\$0	\$ 0.30	\$1,050	\$ 0.30	\$1,050
	Hand Grade Trail	3000	SF	\$ -	\$0	\$ 0.50	\$1,500	\$ 0.50	\$1,500
	G1030 Scarify existing dirt parking lot	10000	SF	\$ -	\$0	\$ 0.05	\$500	\$ 0.05	\$500
	Scarify Existing Trail 500' x 3'	1500	SF	\$ -	\$0	\$ 0.12	\$180	\$ 0.12	\$180
SUBTOTAL	SITE EARTHWORK	1000	SF	\$ 2.19	\$2,188	\$ 11.69	\$11,692	\$ 13.88	\$13,880

Summary Item **G10 Site Preparation**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G10	Site Preparation	1000	SF	\$ 6.19	\$6,188	\$ 36.69	\$36,692	\$ 42.88	\$42,880

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
Park: Bear Arbor NRA
Park Alpha: BEAR
PMIS Number: XXXXXX

Estimate By: YtB
Date: 12/16/10
Reviewed By: BBB
Date: 12/20/10

Summary Item **G20 Site Improvements**

Total Cost: **\$261,685**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G2010	ROADWAYS								
Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G2020	PARKING LOTS								
	Subgrade Prep Parking Lot	4050	SY	\$ -	\$0	\$ 0.75	\$3,038	\$ 0.75	\$3,038
	Furnish & Install 6" Roadbase	4050	SY	\$ 4.75	\$19,238	\$ 4.00	\$16,200	\$ 8.75	\$35,438
	Furnish & Install 3" Asphalt Paving	4050	SY	\$ 8.75	\$35,438	\$ 4.50	\$18,225	\$ 13.25	\$53,663
	Striping	46	Spaces	\$ 10.00	\$460	\$ 32.00	\$1,472	\$ 42.00	\$1,932
	Accessible spaces	4	EA	\$ 85.00	\$340	\$ 165.00	\$660	\$ 250.00	\$1,000
	Sign Allowance	1	Allow	\$ 2,000.00	\$2,000	\$ 500.00	\$500	\$ 2,500.00	\$2,500
	Curb & Gutter	1000	LF	\$ 10.00	\$10,000	\$ 12.50	\$12,500	\$ 22.50	\$22,500
				\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	PARKING LOTS	1000	SF	\$ 67.48	\$67,475	\$ 52.59	\$52,595	\$ 120.07	\$120,070

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G2030	PEDESTRIAN PAVING								
	Pedestrian Sidewalks at parking lot	3500	SF	\$ 4.00	\$14,000	\$ 2.50	\$8,750	\$ 6.50	\$22,750
	Handicap Ramps	2	EA	\$ 400.00	\$800	\$ 450.00	\$900	\$ 850.00	\$1,700
	Furnish & Install Decomposed Granite DG	170	Tons	\$ 45.00	\$7,650	\$ 17.00	\$2,890	\$ 62.00	\$10,540
	Mix, spread, finegrade & compact organic binder	6500	SF	\$ 1.00	\$6,500	\$ 0.50	\$3,250	\$ 1.50	\$9,750
	Pedestrian Sidewalks-Trial Connection	1500	SF	\$ 4.00	\$6,000	\$ 2.50	\$3,750	\$ 6.50	\$9,750
	Concrete Flatwork at Building	2000	SF	\$ 4.00	\$8,000	\$ 2.50	\$5,000	\$ 6.50	\$13,000
			Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	PEDESTRIAN PAVING	1000	SF	\$ 42.95	\$42,950	\$ 24.54	\$24,540	\$ 67.49	\$67,490

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **G20 Site Improvements**

Total Cost: **\$261,685**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G2040	SITE DEVELOPMENT								
	Install new seat resistant single rail fence	500	LF	\$ 35.00	\$17,500	\$ -	\$0	\$ 35.00	\$17,500
				\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	SITE DEVELOPMENT	1000	SF	\$ 17.50	\$17,500	\$ -	\$0	\$ 17.50	\$17,500

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G2050	LANDSCAPING								
	Parking lot landscape allowance	1	LS	\$ 15,000.00	\$15,000	\$ 5,000.00	\$5,000	\$ 20,000.00	\$20,000
	Picnic Area landscape repairs & improvements	1	LS	\$ 500.00	\$500	\$ 2,000.00	\$2,000	\$ 2,500.00	\$2,500
	Trail landscape repairs & improvements	1	LS	\$ 500.00	\$500	\$ 2,000.00	\$2,000	\$ 2,500.00	\$2,500
	Soil amenders	11500	SF	\$ 0.10	\$1,150	\$ 0.15	\$1,725	\$ 0.25	\$2,875
	Place Barrier Rocks	1	Allow	\$ -	\$0	\$ 2,500.00	\$2,500	\$ 2,500.00	\$2,500
	Install native shrubs	150	EA	\$ 30.00	\$4,500	\$ 15.00	\$2,250	\$ 45.00	\$6,750
	Install Selective Trees	20	EA	\$ 250.00	\$5,000	\$ 100.00	\$2,000	\$ 350.00	\$7,000
				\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	LANDSCAPING	1000	SF	\$ 26.65	\$26,650	\$ 17.48	\$17,475	\$ 44.13	\$44,125

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 12/20/10

Summary Item **G20 Site Improvements**

Total Cost: \$261,685

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G2060	SITE FURNISHINGS								
	Misc Site Furnishings	1	Allow	\$ 1,500.00	\$1,500	\$ 1,000.00	\$1,000	\$ 2,500.00	\$2,500
	Reinstall Site Furnishings at Picnic area	1	LS	\$ 4,000.00	\$4,000	\$ 6,000.00	\$6,000	\$ 10,000.00	\$10,000
	Description	0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
				\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	SITE FURNISHINGS	1000	SF	\$ 5.50	\$5,500	\$ 7.00	\$7,000	\$ 12.50	\$12,500

Summary Item **G20 Site Improvements**

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G20	Site Improvements	1000	SF	\$ 160.08	\$160,075	\$ 101.61	\$101,610	\$ 261.68	\$261,685

United States Department of the Interior
National Park Service
Class B Construction Cost Estimate (expanded)

LINE ITEM COST SUMMARY

Project: Oso Comida Trailhead Improvements
 Park: Bear Arbor NRA
 Park Alpha: BEAR
 PMIS Number: XXXXXX

Estimate By: YtB
 Date: 12/16/10
 Reviewed By: BBB
 Date: 1220/10

Summary Item **G30 Site Mechanical Utilities**

Total Cost: \$74,000

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G3010	WATER SUPPLY								
	Water Connection to Bruin Meadows Road	1	Allow	\$ 3,500.00	\$3,500	\$ 5,500.00	\$5,500	\$ 9,000.00	\$9,000
		0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
		0	Unit	\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	WATER SUPPLY	1000	SF	\$ 3.50	\$3,500	\$ 5.50	\$5,500	\$ 9.00	\$9,000

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G3020	SANITARY SEWER								
	Install Septic King Tank & Treatment system	1	LS	\$ 46,000.00	\$46,000	\$ 3,500.00	\$3,500	\$ 49,500.00	\$49,500
	Install Leach field	1	LS	\$ 7,500.00	\$7,500	\$ 3,000.00	\$3,000	\$ 10,500.00	\$10,500
				\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	SANITARY SEWER	1000	SF	\$ 53.50	\$53,500	\$ 6.50	\$6,500	\$ 60.00	\$60,000

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G3030	STORM SEWER								
Optional Code	Parking Lot Drainage Improvements	1	Allow	\$ 3,000.00	\$3,000	\$ 2,000.00	\$2,000	\$ 5,000.00	\$5,000
				\$ -	\$0	\$ -	\$0	\$ -	\$0
				\$ -	\$0	\$ -	\$0	\$ -	\$0
SUBTOTAL	STORM SEWER	1000	SF	\$ 3.00	\$3,000	\$ 2.00	\$2,000	\$ 5.00	\$5,000

Uniformat II WBS Code	Description	Quantity	Unit	MATERIAL		INSTALLATION		TOTALS	
				Material Cost/Unit	Total Material Cost	Install Cost/Unit	Total Install Cost	Total Cost/Unit	Total Cost
G30	Site Mechanical Utilities	1000	SF	\$ 60.00	\$60,000	\$ 14.00	\$14,000	\$ 74.00	\$74,000