

CEF Fact Sheet

St. Joseph's College - Repairs to Dam

Date of Estimate:	October 1, 1998
FEMA Region:	Ill
Preparer(s):	Tom Rathburn (FEMA) and Beth Ingalls (State)
Applicant Name:	St. Joseph's College
Project Title:	Repairs to Dam
Damaged Facility:	Lundberg Dam
Declaration Number:	FEMA-1234-DR-MD
Project Number:	5697
PA ID No.:	955-91000
Date of Inspection:	September 20, 1998
Event Date(s)	September 15, 1998
Work Category:	D
Type of Work: <i>(Enter New, Repair, etc.)</i>	Repair
Scope:	Floodwaters overtopped concrete and earth fill dam. Scour removed 104 LF of concrete (cross section: 17 ft wide at base; 7 ft high at d/s end; 12 ft high at u/s end) and approx 600 CY of structural fill. The remainder of the dam, including the sluice gate, were not damaged. Remove concrete debris from stream and dispose. Construct coffer dam u/s and d/s of breach using steel sheet piling driven to 15 ft depth (4200 SF of sheet piling required). Replace 600 CY of Class X concrete. Replace 600 CY of structural fill.

CEF Notes

St. Joseph's College - Repairs to Dam

Damaged Facility:	Lundberg Dam
Applicant Name:	St. Joseph's College
Project Number:	5697
Date of Estimate:	October 1, 1998
Preparer(s):	Tom Rathburn (FEMA) and Beth Ingalls (State)
Part A Notes:	<p>A.1 - A contractor has been retained to complete all work, but construction has not yet begun. Construction bid costs are used for the repair work.</p> <p>A.2 - Construction bid costs are used for the coffer dam.</p>
Part B Notes:	<p>B.1 - Construction bid costs are used for Part A costs. Additional costs for General Requirements are already included in the construction bid costs.</p> <p>B.2 - Construction bid costs are used for Part A costs. Additional costs for General Conditions are already included in the construction bid costs.</p>
Part C Notes:	<p>C.1 - As with Part B, bid costs used; not applicable.</p> <p>C.2 - Bid costs used; not applicable.</p> <p>C.3 - Bid costs used; not applicable.</p> <p>C.4 - Not applicable for this project.</p>
Part D Notes:	<p>D.1 - A contractor has been retained to complete all work, but construction has not yet begun. Construction bid costs are used for the repair work.</p> <p>D.2 - Contractor's insurance and bond costs are included in the construction bid costs used in Part A.</p> <p>D.3 - Contractor's profit is included in the construction bid costs used in Part A.</p>
Part E Notes:	E.1 - Bid costs used; not applicable.
Part F Notes:	<p>F.1 - Plan review costs based on Montgomery County, MD requirements.</p> <p>F.2 - Construction permit costs based on Montgomery County, MD requirements.</p>
Part G Notes:	G.1 - Standard CEF factor used for Change Orders.
Part H Notes:	<p>H.1 - Standard CEF factor used for Project Management - Design Phase.</p> <p>H.2 - Standard CEF factor used for A/E Design Contract costs.</p> <p>H.3 - Standard CEF factor used for Project Management - Construction Phase.</p>
Miscellaneous Notes & Comments: <i>Use mouse to Activate Cursor:</i>	

CEF Part A Estimate

St. Joseph's College - Repairs to Dam

Item No.	Item Description Title / Component Description	Div. # or Cost Code	Qty	Units	Unit Price	City Adj Factor	Total Cost
Completed							
Permanent							
					\$ -		\$ -
					\$ -		\$ -
					\$ -		\$ -
					\$ -		\$ -
					\$ -		\$ -
Completed - Permanent Total							\$ -
Non-Permanent							
					\$ -		\$ -
					\$ -		\$ -
					\$ -		\$ -
					\$ -		\$ -
					\$ -		\$ -
Completed - Non-Permanent Total							\$ -
Uncompleted							
Permanent							
	Concrete Removal						
1	Concrete removal and disposal	Bid	600.00	CY	\$ 90.00	1.00	\$ 54,000.00
	Repairs to Dam						
2	Structural backfill, 150' haul, sand & gravel from existing stockpile	Bid	600.00	CY	\$ 1.50	1.00	\$ 900.00
3	Plate compact in place, 12" lifts, 2 passes	Bid	600.00	CY	\$ 0.62	1.00	\$ 372.00
4	Concrete poured as grade wall, reinforced, 5' wide, with forms	Bid	600.00	CY	\$ 650.00	1.00	\$ 390,000.00
					\$ -		\$ -
					\$ -		\$ -
Uncompleted - Permanent Total							\$ 445,272.00
Non-Permanent							
	Coffer Dam						
5	Sheet piling - 15" deep excavation, drive, extract and salvage	Bid	4,200.00	SF	\$ 10.50	1.00	\$ 44,100.00
					\$ -		\$ -
					\$ -		\$ -
					\$ -		\$ -
					\$ -		\$ -
					\$ -		\$ -
Uncompleted - Non-Permanent Total							\$ 44,100.00
TOTAL PART A BASE CONSTRUCTION COST							\$ 489,372.00

St. Joseph's College - Repairs to Dam

				Repair	\$ -	\$ -	\$ -	\$ -	Total
PART A				"Base Costs" for Construction Work-In Trades					
A.1	Permanent Work (From Part A Estimate)								\$ -
A.2	Non-Permanent Job Specific Work (From Part A Estimate)								\$ -
Part A Total				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART B				General Requirements and General Conditions					
B.1	General Requirements	Range Low to High		Enter % in Appropriate Column					
	Safety & Security - Airports, Ports & Govt. Owned Marinas	4.0%	6.0%						
	Temporary Services & Utilities	0.0%	1.0%						
	Quality Control	0.0%	1.0%						
	Submittals	0.0%	5.0%						
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2	General Conditions (4.25%)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Part B Total				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through B SUBTOTAL				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART C				Construction Cost Contingencies					
C.1	Design-Phase Scope Contingencies	Range Low to High		Enter % in Appropriate Column					
	Preliminary Engineering Analysis	15.0%	20.0%						
	Working Drawings	2.0%	10.0%						
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C.2	Facility or Project Constructability			Enter % in Appropriate Column					
	Facility or Project Type and Complexity	(See IG for Values)							
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C.3	Access, Storage & Staging Contingencies	Range Low to High		Enter % in Appropriate Column					
	Access Contingencies	1.0%	4.0%						
	Storage Contingencies	1.0%	4.0%						
	Staging Contingencies	1.0%	4.0%						
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C.4	Economies of Scale		0.0%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
				0%	0%	0%	0%	0%	
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Part C Total				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through C SUBTOTAL				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART D				General Contractor's Overhead and Profit					
D.1	GC's Home Office Overhead		7.7%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
D.2	GC's Insurance, Payment & Performance Bonds		3.3%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
D.3	General Contractor's Profit			Select a top box for the type of project, and applicable bottom boxes to apply the factor.					
	New Construction	10.0%		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Repair/Retrofit	10.0%		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Part D Total				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through D SUBTOTAL				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

St. Joseph's College - Repairs to Dam

		Repair	\$ -	\$ -	\$ -	\$ -	Total
PART E Cost Escalation Factors							
E	Cost Escalation Factor	Months					
		Monthly Factor					
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through E SUBTOTAL		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART F Plan Review and Construction Permit Cost							
F.1	Plan Review Fees						
	(List Individual Requirements Separately)						
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
F.2	Construction Permit Fees						
	(List Individual Requirements Separately)						
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Part F Total		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through F SUBTOTAL		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART G Applicant's Reserve for Change Orders							
G	Applicant's Reserve for Change Orders	7.0%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through G SUBTOTAL		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART H Applicant's Project Management and Design Costs							
H.1	Applicant's Project Management - Design Phase	1.0%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			\$ -	\$ -	\$ -	\$ -	\$ -
H.2	A/E Design Contract Cost						
	Above Average Complexity (Curve A)	<input type="checkbox"/>	0.0%	\$ -	\$ -	\$ -	\$ -
	Average Complexity (Curve B)	<input type="checkbox"/>	0.0%	\$ -	\$ -	\$ -	\$ -
	Basic Construction Inspection Services	<input type="checkbox"/>	3.0%	\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H.3	Project Management - Construction Phase	6.0%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			\$ -	\$ -	\$ -	\$ -	\$ -
Part H Total		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through H SUBTOTAL		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL OF COMPLETED WORK							\$0

St. Joseph's College - Repairs to Dam

			Repair	\$ -	\$ -	\$ -	\$ -	\$ -	Total
PART A "Base Costs" for Construction Work-In Trades									
A.1	Permanent Work (From Part A Estimate)		\$ 445,272						\$ 445,272
A.2	Non-Permanent Job Specific Work (From Part A Estimate)		\$ 44,100						\$ 44,100
Part A Total			\$ 489,372	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 489,372
PART B General Requirements and General Conditions									
B.1	General Requirements		Enter % in Appropriate Column						
	Safety & Security - Airports, Ports & Govt. Owned Marina	Range Low to High 4.0% 6.0%							
	Temporary Services & Utilities	0.0% 1.0%							
	Quality Control	0.0% 1.0%							
	Submittals	0.0% 5.0%							
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B.2	General Conditions (4.25%)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Part B Total			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through B SUBTOTAL			\$ 489,372	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 489,372
PART C Construction Cost Contingencies									
C.1	Design-Phase Scope Contingencies		Enter % in Appropriate Column						
	Preliminary Engineering Analysis	Range Low to High 15.0% 20.0%							
	Working Drawings	2.0% 10.0%							
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C.2	Facility or Project Constructability		Enter % in Appropriate Column						
	Facility or Project Type and Complexity	(See IG for Values)							
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C.3	Access, Storage & Staging Contingencies		Enter % in Appropriate Column						
	Access Contingencies	Range Low to High 1.0% 4.0%							
	Storage Contingencies	1.0% 4.0%							
	Staging Contingencies	1.0% 4.0%							
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C.4	Economies of Scale		0.0%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Part C Total			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through C SUBTOTAL			\$ 489,372	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 489,372
PART D General Contractor's Overhead and Profit									
D.1	GC's Home Office Overhead		7.7%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
D.2	GC's Insurance, Payment & Performance Bonds		3.3%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
D.3	General Contractor's Profit			Select a top box for the type of project, and applicable bottom boxes to apply the factor.					
	New Construction	10.0%	New Construction	<input type="checkbox"/>	Repair/Retrofit	<input type="checkbox"/>			
	Repair/Retrofit	10.0%		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Part D Total			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through D SUBTOTAL			\$ 489,372	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 489,372

St. Joseph's College - Repairs to Dam

				Repair	\$ -	\$ -	\$ -	\$ -	Total
PART E				Cost Escalation Factors					
E	Cost Escalation Factor	Months	Monthly Factor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PART A through E SUBTOTAL				\$ 489,372	\$ -	\$ -	\$ -	\$ -	\$ 489,372
PART F				Plan Review and Construction Permit Cost					
F.1	Plan Review Fees			\$ 4,197					
		Dam Safety Review Fees, Montgomery County, MD							
				\$ 4,197	\$ -	\$ -	\$ -	\$ -	\$ 4,197
F.2	Construction Permit Fees			\$ 8,393					
		Local Building Permit, Montgomery County, MD							
				\$ 8,393	\$ -	\$ -	\$ -	\$ -	\$ 8,393
Part F Total				\$ 12,590	\$ -	\$ -	\$ -	\$ -	\$ 12,590
PART A through F SUBTOTAL				\$ 501,962	\$ -	\$ -	\$ -	\$ -	\$ 501,962
PART G				Applicant's Reserve for Change Orders					
G	Applicant's Reserve for Change Orders	6.3%	<input checked="" type="checkbox"/>	\$ 31,769	\$ -	\$ -	\$ -	\$ -	\$ 31,769
PART A through G SUBTOTAL				\$ 533,731	\$ -	\$ -	\$ -	\$ -	\$ 533,731
PART H				Applicant's Project Management and Design Costs					
H.1	Applicant's Project Management - Design Phase	1.0%	<input checked="" type="checkbox"/>	\$ 5,337	\$ -	\$ -	\$ -	\$ -	\$ 5,337
H.2	A/E Design Contract Cost	Above Average Complexity (Curve A)	<input type="checkbox"/>	8.4%	\$ -	\$ -	\$ -	\$ -	\$ -
		Average Complexity (Curve B)	<input checked="" type="checkbox"/>	6.8%	\$ 36,467	\$ -	\$ -	\$ -	\$ -
		Basic Construction Inspection Services	<input type="checkbox"/>	3.0%	\$ -	\$ -	\$ -	\$ -	\$ -
					\$ 36,467	\$ -	\$ -	\$ -	\$ -
H.3	Project Management - Construction Phase	5.0%	<input checked="" type="checkbox"/>	\$ 31,784	\$ -	\$ -	\$ -	\$ -	\$ 31,784
Part H Total				\$ 73,589	\$ -	\$ -	\$ -	\$ -	\$ 73,589
PART A through H SUBTOTAL				\$ 607,320	\$ -	\$ -	\$ -	\$ -	\$ 607,320
TOTAL OF UNCOMPLETED WORK									\$607,320

Total Project Summary

St. Joseph's College - Repairs to Dam

		Completed	Uncompleted	Total
PART A	"Base Costs" for Construction Work In Trades	\$ -	\$ 489,372	\$ 489,372
	A.1 Permanent Work	\$ -	\$ 445,272	\$ 445,272
	A.2 Non-Permanent Job Specific Work (From Part A Estimate)	\$ -	\$ 44,100	\$ 44,100
PART B	General Requirements and General Conditions	\$ -	\$ -	\$ -
	B.1 General Requirements	\$ -	\$ -	\$ -
	B.2 General Conditions	\$ -	\$ -	\$ -
PART C	Construction Cost Contingencies (Design and Construction)	\$ -	\$ -	\$ -
	C.1 Standard Design-Phase Scope Contingencies	\$ -	\$ -	\$ -
	C.2 Facility or Project Constructability	\$ -	\$ -	\$ -
	C.3 Access, Storage, and Staging Contingencies	\$ -	\$ -	\$ -
	C.4 Economies of Scale in New Construction	\$ -	\$ -	\$ -
PART D	General Contractor's Overhead and Profit	\$ -	\$ -	\$ -
	D.1 General Contractor's Home Office Overhead Costs	\$ -	\$ -	\$ -
	D.2 General Contractor's Insurance, Payment, and Performance Bonds	\$ -	\$ -	\$ -
	D.3 Contractor's Profit	\$ -	\$ -	\$ -
PART E	Cost Escalation Allowance	\$ -	\$ -	\$ -
PART F	Plan Review and Construction Permit Costs	\$ -	\$ 12,590	\$ 12,590
	F.1 Plan Review Fees	\$ -	\$ 4,197	\$ 4,197
	F.2 Construction Permit Fees	\$ -	\$ 8,393	\$ 8,393
PART G	Applicant's Reserve for Construction	\$ -	\$ 31,769	\$ 31,769
PART H	Applicant's Project Management and Design Costs	\$ -	\$ 73,589	\$ 73,589
	H.1 Applicant's Project Management - Design Phase	\$ -	\$ 5,337	\$ 5,337
	H.2 Architecture & Engineering Design Contract Costs	\$ -	\$ 36,467	\$ 36,467
	H.3 Project Management - Construction Phase	\$ -	\$ 31,784	\$ 31,784
Complete Project Total for Completed and Uncompleted Work		\$ -	\$ 607,320	\$ 607,320