

CONSTRUCTION DIVISION
SPECIFICATION NO. 2808
 2020-2022 MARINE IMPROVEMENTS

ENGINEERING ESTIMATE: \$15,850,450.00
 ADVERTISED DATE: JANUARY 9, 2020
 BID OPENING DATE: FEBRUARY 20, 2020

PROJ. CONST. MGR.: PHONG NGO

	REDUCED BID AMOUNT		GRAND TOTAL ITEM 1-70	
	GRAND TOTAL SUM LESS LOCAL BUSINESS PREFERENCE		BI Description Unit of Measure Approximate Quantiy	
ENGINEERING ESTIMATE	\$	15,850,450.00	\$	16,850,450.00
1 Manson Construction Co.	\$	13,619,700.00	\$	14,619,700.00
2 Drill Tech Drilling & Shoring, Inc	\$	16,093,850.00	\$	16,093,850.00
1) AVERAGE BID		\$15,188,000.00		\$15,854,666.67
2) STANDARD DEVIATION	\$	1,113,398.57	\$	926,271.34
3) ENG. EST. - LOW BIDDER	\$	2,230,750.00	\$	2,230,750.00

TRANSMITTAL 1

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	Main Bid 1		Main Bid 2	
	ITEM 1		ITEM 2	
	Timber Fender Pile Removal: For furnishing transportation.		Timber Bearing Pile Removal: For furnishing transportation.	
	Each		Each	
	100		100	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 950.00	\$ 95,000.00	\$ 1,000.00	\$ 100,000.00
1 Manson Construction Co.	\$ 1,170.00	\$ 117,000.00	\$ 880.00	\$ 88,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 900.00	\$ 90,000.00	\$ 970.00	\$ 97,000.00
1) AVERAGE BID	\$ 1,006.67	\$ 100,666.67	\$ 950.00	\$ 95,000.00
2) STANDARD DEVIATION	\$ 117.28	\$ 11,728.41	\$ 50.99	\$ 5,099.02
3) ENG. EST. - LOW BIDDER	\$ (220.00)	\$ (22,000.00)	\$ 120.00	\$ 12,000.00

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PROJ. CONST. MGR.: PHONG NGO

Main Bid
3

Main Bid
4

	ITEM 3		ITEM 4	
	24-Inch Concrete Pile Removal: For furnishing		18-Inch Concrete Pile Removal: For furnishing	
	Each		Each	
	100		100	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 2,250.00	\$ 225,000.00	\$ 1,650.00	\$ 165,000.00
1 Manson Construction Co.	\$ 2,120.00	\$ 212,000.00	\$ 1,780.00	\$ 178,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 2,700.00	\$ 270,000.00	\$ 1,900.00	\$ 190,000.00

1) AVERAGE BID	\$ 2,356.67	\$ 235,666.67	\$ 1,776.67	\$ 177,666.67
2) STANDARD DEVIATION	\$ 248.51	\$ 24,850.67	\$ 102.09	\$ 10,208.93
3) ENG. EST. - LOW BIDDER	\$ 130.00	\$ 13,000.00	\$ (130.00)	\$ (13,000.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 5		Main Bid 6	
	ITEM 5		ITEM 6	
	Diving: For furnishing transportation, labor, materials, and 8 hour shifts		Mobilization And Demobilization For Timber Pile Removal Mob and Demob	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 3,500.00	\$ 262,500.00	\$ 8,500.00	\$ 42,500.00
1 Manson Construction Co.	\$ 3,500.00	\$ 262,500.00	\$ 30,000.00	\$ 150,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 3,600.00	\$ 270,000.00	\$ 28,000.00	\$ 140,000.00
1) AVERAGE BID	\$ 3,533.33	\$ 265,000.00	\$ 22,166.67	\$ 110,833.33
2) STANDARD DEVIATION	\$ 47.14	\$ 3,535.53	\$ 9,698.22	\$ 48,491.12
3) ENG. EST. - LOW BIDDER	\$ -	\$ -	\$ (21,500.00)	\$ (107,500.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 7		Main Bid 8	
	ITEM 7		ITEM 8	
	Mobilization And Demobilization For Concrete Pile Removal		Furnish 24-Inch Octagonal 24A Concrete Piles: For	
	Mob and Demob		Linear Feet	
	5		3000	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 10,000.00	\$ 50,000.00	\$ 125.00	\$ 375,000.00
1 Manson Construction Co.	\$ 36,850.00	\$ 184,250.00	\$ 151.00	\$ 453,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 28,000.00	\$ 140,000.00	\$ 140.00	\$ 420,000.00
1) AVERAGE BID	\$ 24,950.00	\$ 124,750.00	\$ 138.67	\$ 416,000.00
2) STANDARD DEVIATION	\$ 11,171.62	\$ 55,858.08	\$ 10.66	\$ 31,968.73
3) ENG. EST. - LOW BIDDER	\$ (26,850.00)	\$ (134,250.00)	\$ (26.00)	\$ (78,000.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 9		Main Bid 10	
	ITEM 9		ITEM 10	
	Install 24-Inch Octagonal 24A Concrete Piles from		Furnish 24-Inch Octagonal 24B Concrete Piles: For	
	Each		Linear Feet	
	30		3000	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 4,500.00	\$ 135,000.00	\$ 125.00	\$ 375,000.00
1 Manson Construction Co.	\$ 4,410.00	\$ 132,300.00	\$ 144.00	\$ 432,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 4,000.00	\$ 120,000.00	\$ 135.00	\$ 405,000.00
1) AVERAGE BID	\$ 4,303.33	\$ 129,100.00	\$ 134.67	\$ 404,000.00
2) STANDARD DEVIATION	\$ 217.61	\$ 6,528.40	\$ 7.76	\$ 23,280.89
3) ENG. EST. - LOW BIDDER	\$ 90.00	\$ 2,700.00	\$ (19.00)	\$ (57,000.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 11		Main Bid 12			
	ITEM 11		ITEM 12			
	Install 24-Inch Octagonal 24B Concrete Piles from Landside:		Install 24-Inch Octagonal 24B Concrete Batter Piles from			
	Each		Each			
	30		30			
	Unit Price	Extended Price	Unit Price	Extended Price		
ENGINEERING ESTIMATE	\$ 3,200.00	\$ 96,000.00	\$ 4,000.00	\$ 120,000.00		
1 Manson Construction Co.	\$ 3,000.00	\$ 90,000.00	\$ 4,410.00	\$ 132,300.00		
2 Drill Tech Drilling & Shoring, Inc	\$ 2,400.00	\$ 72,000.00	\$ 4,000.00	\$ 120,000.00		
1) AVERAGE BID	\$ 2,866.67	\$ 86,000.00	\$ 4,136.67	\$ 124,100.00		
2) STANDARD DEVIATION	\$ 339.93	\$ 10,198.04	\$ 193.28	\$ 5,798.28		
3) ENG. EST. - LOW BIDDER	\$ 200.00	\$ 6,000.00	\$ (410.00)	\$ (12,300.00)		

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 13		Main Bid 14	
	ITEM 13		ITEM 14	
	Furnish 18-Inch Octagonal 18A Concrete Piles: For		Install 18-Inch Octagonal 18A Concrete Piles from	
	Linear Feet		Each	
	3000		30	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 110.00	\$ 330,000.00	\$ 4,200.00	\$ 126,000.00
1 Manson Construction Co.	\$ 114.00	\$ 342,000.00	\$ 4,280.00	\$ 128,400.00
2 Drill Tech Drilling & Shoring, Inc	\$ 100.00	\$ 300,000.00	\$ 3,900.00	\$ 117,000.00
1) AVERAGE BID	\$ 108.00	\$ 324,000.00	\$ 4,126.67	\$ 123,800.00
2) STANDARD DEVIATION	\$ 5.89	\$ 17,663.52	\$ 163.57	\$ 4,907.14
3) ENG. EST. - LOW BIDDER	\$ (4.00)	\$ (12,000.00)	\$ (80.00)	\$ (2,400.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 15		Main Bid 16	
	ITEM 15		ITEM 16	
	Furnish 18-Inch Octagonal 18B Concrete Piles: For		Install 18-Inch Octagonal 18B Concrete Piles from Landside:	
	Linear Feet		Each	
	3000		30	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 110.00	\$ 330,000.00	\$ 3,150.00	\$ 94,500.00
1 Manson Construction Co.	\$ 108.00	\$ 324,000.00	\$ 2,850.00	\$ 85,500.00
2 Drill Tech Drilling & Shoring, Inc	\$ 95.00	\$ 285,000.00	\$ 2,400.00	\$ 72,000.00
1) AVERAGE BID	\$ 104.33	\$ 313,000.00	\$ 2,800.00	\$ 84,000.00
2) STANDARD DEVIATION	\$ 6.65	\$ 19,949.94	\$ 308.22	\$ 9,246.62
3) ENG. EST. - LOW BIDDER	\$ 2.00	\$ 6,000.00	\$ 300.00	\$ 9,000.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 17		Main Bid 18	
	ITEM 17		ITEM 18	
	Install 18-Inch Octagonal 18B Concrete Batter Piles from		Mobilization And Demobilization For Concrete Pile Driving	
	Each		Mob and Demob	
	30		5	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 3,800.00	\$ 114,000.00	\$ 36,000.00	\$ 180,000.00
1 Manson Construction Co.	\$ 4,800.00	\$ 144,000.00	\$ 41,500.00	\$ 207,500.00
2 Drill Tech Drilling & Shoring, Inc	\$ 3,900.00	\$ 117,000.00	\$ 28,000.00	\$ 140,000.00
1) AVERAGE BID	\$ 4,166.67	\$ 125,000.00	\$ 35,166.67	\$ 175,833.33
2) STANDARD DEVIATION	\$ 449.69	\$ 13,490.74	\$ 5,542.76	\$ 27,713.82
3) ENG. EST. - LOW BIDDER	\$ (1,000.00)	\$ (30,000.00)	\$ (5,500.00)	\$ (27,500.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 19		Main Bid 20	
	ITEM 19		ITEM 20	
	Mobilization And Demobilization For Concrete Pile Driving Mob and Demob		Differential Costs To Drive Octagonal Concrete Piles Using Each	
	5		5	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 60,000.00	\$ 300,000.00	\$ 3,000.00	\$ 15,000.00
1 Manson Construction Co.	\$ 73,600.00	\$ 368,000.00	\$ 5,560.00	\$ 27,800.00
2 Drill Tech Drilling & Shoring, Inc	\$ 50,000.00	\$ 250,000.00	\$ 2,000.00	\$ 10,000.00
1) AVERAGE BID	\$ 61,200.00	\$ 306,000.00	\$ 3,520.00	\$ 17,600.00
2) STANDARD DEVIATION	\$ 9,671.95	\$ 48,359.76	\$ 1,499.16	\$ 7,495.78
3) ENG. EST. - LOW BIDDER	\$ (13,600.00)	\$ (68,000.00)	\$ (2,560.00)	\$ (12,800.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 21		Main Bid 22	
	ITEM 21		ITEM 22	
	Restrike Octagonal Concrete Piles: For furnishing		Differential Costs To Restrike Octagonal Concrete Piles	
	Each		Each	
	5		5	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 2,700.00	\$ 13,500.00	\$ 3,500.00	\$ 17,500.00
1 Manson Construction Co.	\$ 2,250.00	\$ 11,250.00	\$ 3,450.00	\$ 17,250.00
2 Drill Tech Drilling & Shoring, Inc	\$ 2,000.00	\$ 10,000.00	\$ 3,000.00	\$ 15,000.00
1) AVERAGE BID	\$ 2,316.67	\$ 11,583.33	\$ 3,316.67	\$ 16,583.33
2) STANDARD DEVIATION	\$ 289.64	\$ 1,448.18	\$ 224.85	\$ 1,124.23
3) ENG. EST. - LOW BIDDER	\$ 450.00	\$ 2,250.00	\$ 50.00	\$ 250.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 23		Main Bid 24	
	ITEM 23		ITEM 24	
	Furnish Timber Fender Piles:For furnishing transportation, Linear Feet		Install Timber Fender Piles: For furnishing transportation, Each	
	3250		50	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 50.00	\$ 162,500.00	\$ 2,500.00	\$ 125,000.00
1 Manson Construction Co.	\$ 41.00	\$ 133,250.00	\$ 3,075.00	\$ 153,750.00
2 Drill Tech Drilling & Shoring, Inc	\$ 55.00	\$ 178,750.00	\$ 2,400.00	\$ 120,000.00
1) AVERAGE BID	\$ 48.67	\$ 158,166.67	\$ 2,658.33	\$ 132,916.67
2) STANDARD DEVIATION	\$ 5.79	\$ 18,826.33	\$ 297.44	\$ 14,872.14
3) ENG. EST. - LOW BIDDER	\$ 9.00	\$ 29,250.00	\$ (575.00)	\$ (28,750.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 25		Main Bid 26	
	ITEM 25		ITEM 26	
	Furnish And Install Rubber Marine Fenders: For furnishing		Furnish Timber Bearing And Batter Piles: For furnishing	
	Each		Linear Feet	
	25		2500	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 35,000.00	\$ 875,000.00	\$ 50.00	\$ 125,000.00
1 Manson Construction Co.	\$ 34,300.00	\$ 857,500.00	\$ 41.00	\$ 102,500.00
2 Drill Tech Drilling & Shoring, Inc	\$ 23,000.00	\$ 575,000.00	\$ 55.00	\$ 137,500.00
1) AVERAGE BID	\$ 30,766.67	\$ 769,166.67	\$ 48.67	\$ 121,666.67
2) STANDARD DEVIATION	\$ 5,499.29	\$ 137,482.32	\$ 5.79	\$ 14,481.79
3) ENG. EST. - LOW BIDDER	\$ 700.00	\$ 17,500.00	\$ 9.00	\$ 22,500.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 27		Main Bid 28	
	ITEM 27		ITEM 28	
	Install Timber Bearing Piles from Landside: For furnishing		Install Timber Bearing Piles from Waterside: For furnishing	
	Each		Each	
	25		25	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 2,500.00	\$ 62,500.00	\$ 3,250.00	\$ 81,250.00
1 Manson Construction Co.	\$ 3,600.00	\$ 90,000.00	\$ 3,800.00	\$ 95,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 1,700.00	\$ 42,500.00	\$ 2,500.00	\$ 62,500.00
1) AVERAGE BID	\$ 2,600.00	\$ 65,000.00	\$ 3,183.33	\$ 79,583.33
2) STANDARD DEVIATION	\$ 778.89	\$ 19,472.20	\$ 532.81	\$ 13,320.31
3) ENG. EST. - LOW BIDDER	\$ (1,100.00)	\$ (27,500.00)	\$ (550.00)	\$ (13,750.00)

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PROJ. CONST. MGR.: PHONG NGO

Main Bid
29

Main Bid
30

	ITEM 29		ITEM 30	
	Install Timber Batter Piles from Waterside: For furnishing		Timber Bearing Pile Repair: For furnishing transportation,	
	Each		Each	
	30		40	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 3,650.00	\$ 109,500.00	\$ 9,500.00	\$ 380,000.00
1 Manson Construction Co.	\$ 5,150.00	\$ 154,500.00	\$ 8,900.00	\$ 356,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 2,500.00	\$ 75,000.00	\$ 10,000.00	\$ 400,000.00

1) AVERAGE BID	\$ 3,766.67	\$ 113,000.00	\$ 9,466.67	\$ 378,666.67
2) STANDARD DEVIATION	\$ 1,085.00	\$ 32,549.96	\$ 449.69	\$ 17,987.65
3) ENG. EST. - LOW BIDDER	\$ (1,500.00)	\$ (45,000.00)	\$ 600.00	\$ 24,000.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 31		Main Bid 32	
	ITEM 31		ITEM 32	
	Timber Bearing Pile Offset Installation: For furnishing		Mobilization And Demobilization For Timber Pile Driving from	
	Each		Mob and Demob	
	10		5	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 6,000.00	\$ 60,000.00	\$ 27,000.00	\$ 135,000.00
1 Manson Construction Co.	\$ 5,325.00	\$ 53,250.00	\$ 23,500.00	\$ 117,500.00
2 Drill Tech Drilling & Shoring, Inc	\$ 6,500.00	\$ 65,000.00	\$ 28,000.00	\$ 140,000.00
1) AVERAGE BID	\$ 5,941.67	\$ 59,416.67	\$ 26,166.67	\$ 130,833.33
2) STANDARD DEVIATION	\$ 481.46	\$ 4,814.62	\$ 1,929.31	\$ 9,646.53
3) ENG. EST. - LOW BIDDER	\$ 675.00	\$ 6,750.00	\$ 3,500.00	\$ 17,500.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 33		Main Bid 34	
	ITEM 33		ITEM 34	
	Mobilization And Demobilization For Timber Pile Driving from Mob and Demob		Timber Pile Wrap: For furnishing transportation, labor, Each	
	5		100	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 35,000.00	\$ 175,000.00	\$ 1,450.00	\$ 145,000.00
1 Manson Construction Co.	\$ 23,500.00	\$ 117,500.00	\$ 2,450.00	\$ 245,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 25,000.00	\$ 125,000.00	\$ 1,200.00	\$ 120,000.00
1) AVERAGE BID	\$ 27,833.33	\$ 139,166.67	\$ 1,700.00	\$ 170,000.00
2) STANDARD DEVIATION	\$ 5,104.46	\$ 25,522.32	\$ 540.06	\$ 54,006.17
3) ENG. EST. - LOW BIDDER	\$ 11,500.00	\$ 57,500.00	\$ (1,000.00)	\$ (100,000.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 35		Main Bid 36	
	ITEM 35		ITEM 36	
	Timber Pile Tidal Wrap: For furnishing transportation, labor,		Timber Pile Submerged Wrap Termination: For furnishing	
	Each		Each	
	100		100	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 800.00	\$ 80,000.00	\$ 1,500.00	\$ 150,000.00
1 Manson Construction Co.	\$ 925.00	\$ 92,500.00	\$ 1,800.00	\$ 180,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 1,200.00	\$ 120,000.00	\$ 1,300.00	\$ 130,000.00
1) AVERAGE BID	\$ 975.00	\$ 97,500.00	\$ 1,533.33	\$ 153,333.33
2) STANDARD DEVIATION	\$ 167.08	\$ 16,708.28	\$ 205.48	\$ 20,548.05
3) ENG. EST. - LOW BIDDER	\$ (125.00)	\$ (12,500.00)	\$ (300.00)	\$ (30,000.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 37		Main Bid 38	
	ITEM 37		ITEM 38	
	Timber Pile Rockline Crater Digging And Submerged Wrap		Timber Bullrail: For furnishing transportation, labor,	
	Each		Linear Feet	
	100		1000	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 950.00	\$ 95,000.00	\$ 60.00	\$ 60,000.00
1 Manson Construction Co.	\$ 850.00	\$ 85,000.00	\$ 48.00	\$ 48,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 1,100.00	\$ 110,000.00	\$ 48.00	\$ 48,000.00

1) AVERAGE BID	\$ 966.67	\$ 96,666.67	\$ 52.00	\$ 52,000.00
2) STANDARD DEVIATION	\$ 102.74	\$ 10,274.02	\$ 5.66	\$ 5,656.85
3) ENG. EST. - LOW BIDDER	\$ 100.00	\$ 10,000.00	\$ 12.00	\$ 12,000.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 39				Main Bid 40			
	ITEM 39				ITEM 40			
	Furnish And Place Quarry Run (2,000 Tons Or Less Per				Furnish And Place Quarry Run (Greater Than 2,000 Tons			
	Tons				Tons			
	3000			3000				
	Unit Price	Extended Price		Unit Price	Extended Price			
ENGINEERING ESTIMATE	\$ 65.00	\$ 195,000.00		\$ 66.00	\$ 198,000.00			
1 Manson Construction Co.	\$ 69.00	\$ 207,000.00		\$ 64.50	\$ 193,500.00			
2 Drill Tech Drilling & Shoring, Inc	\$ 60.00	\$ 180,000.00		\$ 58.00	\$ 174,000.00			
1) AVERAGE BID	\$ 64.67	\$ 194,000.00		\$ 62.83	\$ 188,500.00			
2) STANDARD DEVIATION	\$ 3.68	\$ 11,045.36		\$ 3.47	\$ 10,416.33			
3) ENG. EST. - LOW BIDDER	\$ (4.00)	\$ (12,000.00)		\$ 1.50	\$ 4,500.00			

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 41		Main Bid 42	
	ITEM 41		ITEM 42	
	Furnish And Place Riprap: For furnishing transportation, Tons 5000		Mobilization And Demobilization For Placing Quarry Run And Each 5	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 70.00	\$ 350,000.00	\$ 37,500.00	\$ 187,500.00
1 Manson Construction Co.	\$ 86.00	\$ 430,000.00	\$ 65,600.00	\$ 328,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 75.00	\$ 375,000.00	\$ 30,000.00	\$ 150,000.00
1) AVERAGE BID	\$ 77.00	\$ 385,000.00	\$ 44,366.67	\$ 221,833.33
2) STANDARD DEVIATION	\$ 6.68	\$ 33,416.56	\$ 15,323.26	\$ 76,616.29
3) ENG. EST. - LOW BIDDER	\$ (16.00)	\$ (80,000.00)	\$ (28,100.00)	\$ (140,500.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 43			Main Bid 44		
	ITEM 43			ITEM 44		
	Furnish And Install Sheet Steel Piles In Water (25 Tons Or Tons			Furnish And Install Sheet Steel Piles In Water (Greater Than Tons		
	50			50		
	Unit Price	Extended Price		Unit Price	Extended Price	
ENGINEERING ESTIMATE	\$ 5,500.00	\$ 275,000.00	\$ 5,500.00	\$ 275,000.00	\$ 275,000.00	
1 Manson Construction Co.	\$ 4,450.00	\$ 222,500.00	\$ 4,450.00	\$ 222,500.00	\$ 222,500.00	
2 Drill Tech Drilling & Shoring, Inc	\$ 5,700.00	\$ 285,000.00	\$ 5,700.00	\$ 285,000.00	\$ 285,000.00	
1) AVERAGE BID	\$ 5,216.67	\$ 260,833.33	\$ 5,216.67	\$ 260,833.33	\$ 260,833.33	
2) STANDARD DEVIATION	\$ 548.23	\$ 27,411.47	\$ 548.23	\$ 27,411.47	\$ 27,411.47	
3) ENG. EST. - LOW BIDDER	\$ 1,050.00	\$ 52,500.00	\$ 1,050.00	\$ 52,500.00	\$ 52,500.00	

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 45		Main Bid 46	
	ITEM 45		ITEM 46	
	Mobilization And Demobilization For Sheet Steel Pile Driving		Shortcrete Repairs: For furnishing transportation, labor,	
	Each		Sq. Ft. - In.	
	3		5000	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 44,000.00	\$ 132,000.00	\$ 65.00	\$ 325,000.00
1 Manson Construction Co.	\$ 42,500.00	\$ 127,500.00	\$ 119.00	\$ 595,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 42,000.00	\$ 126,000.00	\$ 76.00	\$ 380,000.00
1) AVERAGE BID	\$ 42,833.33	\$ 128,500.00	\$ 86.67	\$ 433,333.33
2) STANDARD DEVIATION	\$ 849.84	\$ 2,549.51	\$ 23.30	\$ 116,499.88
3) ENG. EST. - LOW BIDDER	\$ 1,500.00	\$ 4,500.00	\$ (54.00)	\$ (270,000.00)

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 47		Main Bid 48	
	ITEM 47		ITEM 48	
	Mobilization And Demobilization For Shotcrete: For		Dredging And Disposing Of Materials To Berths 243-245	
	Each		Cubic Yards	
	5		10000	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 8,250.00	\$ 41,250.00	\$ 50.00	\$ 500,000.00
1 Manson Construction Co.	\$ 5,550.00	\$ 27,750.00	\$ 46.00	\$ 460,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 12,000.00	\$ 60,000.00	\$ 65.00	\$ 650,000.00
1) AVERAGE BID	\$ 8,600.00	\$ 43,000.00	\$ 53.67	\$ 536,666.67
2) STANDARD DEVIATION	\$ 2,644.81	\$ 13,224.03	\$ 8.18	\$ 81,785.63
3) ENG. EST. - LOW BIDDER	\$ 2,700.00	\$ 13,500.00	\$ 4.00	\$ 40,000.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 49		Main Bid 50	
	ITEM 49		ITEM 50	
	Dredging And Disposing Of Materials To Berths 243-245		Dredging And Disposing Of Materials At Sea (2,500 Cubic	
	Cubic Yards		Cubic Yards	
	20000		10000	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 48.00	\$ 960,000.00	\$ 40.00	\$ 400,000.00
1 Manson Construction Co.	\$ 41.00	\$ 820,000.00	\$ 21.50	\$ 215,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 55.00	\$ 1,100,000.00	\$ 50.00	\$ 500,000.00

1) AVERAGE BID	\$ 48.00	\$ 960,000.00	\$ 37.17	\$ 371,666.67
2) STANDARD DEVIATION	\$ 5.72	\$ 114,309.52	\$ 11.81	\$ 118,063.07
3) ENG. EST. - LOW BIDDER	\$ 7.00	\$ 140,000.00	\$ 18.50	\$ 185,000.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 51		Main Bid 52	
	ITEM 51		ITEM 52	
	Dredging And Disposing Of Materials At Sea (Greater Than Cubic Yards 75000		Mobilization And Demobilization For Dredging: For furnishing Each 10	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 35.00	\$ 2,625,000.00	\$ 90,000.00	\$ 900,000.00
1 Manson Construction Co.	\$ 14.00	\$ 1,050,000.00	\$ 32,000.00	\$ 320,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 27.00	\$ 2,025,000.00	\$ 75,000.00	\$ 750,000.00
1) AVERAGE BID	\$ 25.33	\$ 1,900,000.00	\$ 65,666.67	\$ 656,666.67
2) STANDARD DEVIATION	\$ 8.65	\$ 649,037.75	\$ 24,580.93	\$ 245,809.32
3) ENG. EST. - LOW BIDDER	\$ 21.00	\$ 1,575,000.00	\$ 58,000.00	\$ 580,000.00

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PROJ. CONST. MGR.: PHONG NGO

Main Bid
53

Main Bid
54

	ITEM 53		ITEM 54	
	Mobilization And Demobilization For Dredging In Shallow Mob and Demob		Dredging In Shallow Waters And Disposing Of Materials At Cubic Yards	
	3		12000	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 32,650.00	\$ 97,950.00	\$ 68.00	\$ 816,000.00
1 Manson Construction Co.	\$ 30,000.00	\$ 90,000.00	\$ 39.50	\$ 474,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 75,000.00	\$ 225,000.00	\$ 65.00	\$ 780,000.00

1) AVERAGE BID	\$ 45,883.33	\$ 137,650.00	\$ 57.50	\$ 690,000.00
2) STANDARD DEVIATION	\$ 20,617.00	\$ 61,850.99	\$ 12.79	\$ 153,440.54
3) ENG. EST. - LOW BIDDER	\$ 2,650.00	\$ 7,950.00	\$ 28.50	\$ 342,000.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 55		Main Bid 56	
	ITEM 55		ITEM 56	
	Water Quality Sampling: For furnishing transportation, labor, Dredging Events		Water Quality Reports: For furnishing transportation, labor, Reports	
	50		10	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 1,200.00	\$ 60,000.00	\$ 1,950.00	\$ 19,500.00
1 Manson Construction Co.	\$ 1,750.00	\$ 87,500.00	\$ 250.00	\$ 2,500.00
2 Drill Tech Drilling & Shoring, Inc	\$ 2,568.00	\$ 128,400.00	\$ 395.00	\$ 3,950.00

1) AVERAGE BID	\$ 1,839.33	\$ 91,966.67	\$ 865.00	\$ 8,650.00
2) STANDARD DEVIATION	\$ 562.04	\$ 28,102.23	\$ 769.49	\$ 7,694.91
3) ENG. EST. - LOW BIDDER	\$ (550.00)	\$ (27,500.00)	\$ 1,700.00	\$ 17,000.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 57		Main Bid 58	
	ITEM 57		ITEM 58	
	Slurry To Repair Slopes In The Tidal Zone (Minimum Order Cubic Yards		Submerged Concrete-Filled Sandbags (Minimum Order 50 Sandbags	
	1000		500	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 250.00	\$ 250,000.00	\$ 50.00	\$ 25,000.00
1 Manson Construction Co.	\$ 115.00	\$ 115,000.00	\$ 25.00	\$ 12,500.00
2 Drill Tech Drilling & Shoring, Inc	\$ 210.00	\$ 210,000.00	\$ 45.00	\$ 22,500.00
1) AVERAGE BID	\$ 191.67	\$ 191,666.67	\$ 40.00	\$ 20,000.00
2) STANDARD DEVIATION	\$ 56.62	\$ 56,617.63	\$ 10.80	\$ 5,400.62
3) ENG. EST. - LOW BIDDER	\$ 135.00	\$ 135,000.00	\$ 25.00	\$ 12,500.00

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PROJ. CONST. MGR.: PHONG NGO

	Main Bid 59		Main Bid 60	
	ITEM 59		ITEM 60	
	Polyurethane Pressure Grouting: For furnishing		Crane Rail Repairs: For furnishing transportation, labor,	
	Pounds 25000		Crane Rail Repairs	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 8.00	\$ 200,000.00	\$ 71,500.00	\$ 286,000.00
1 Manson Construction Co.	\$ 9.75	\$ 243,750.00	\$ 14,350.00	\$ 57,400.00
2 Drill Tech Drilling & Shoring, Inc	\$ 6.35	\$ 158,750.00	\$ 19,000.00	\$ 76,000.00
1) AVERAGE BID	\$ 8.03	\$ 200,833.33	\$ 34,950.00	\$ 139,800.00
2) STANDARD DEVIATION	\$ 1.39	\$ 34,706.11	\$ 25,914.38	\$ 103,657.51
3) ENG. EST. - LOW BIDDER	\$ (1.75)	\$ (43,750.00)	\$ 57,150.00	\$ 228,600.00

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PROJ. CONST. MGR.: PHONG NGO

	Allowance Item 61		Allowance Item 62	
	ITEM 61		ITEM 62	
	Wharf Repairs, Renovations, and Improvements: Bidder Lump Sum		Acceleration/Overtime: Bidder shall include in the bid the Lump Sum	
	1	1	1	1
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 500,000.00	\$ 500,000.00	\$ 50,000.00	\$ 50,000.00
1 Manson Construction Co.	\$ 500,000.00	\$ 500,000.00	\$ 50,000.00	\$ 50,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 500,000.00	\$ 500,000.00	\$ 50,000.00	\$ 50,000.00
1) AVERAGE BID	\$ 500,000.00	\$ 500,000.00	\$ 50,000.00	\$ 50,000.00
2) STANDARD DEVIATION	\$ -	\$ -	\$ -	\$ -
3) ENG. EST. - LOW BIDDER	\$ -	\$ -	\$ -	\$ -

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PROJ. CONST. MGR.: PHONG NGO

	Allowance Item 63		Allowance Item 64	
	ITEM 63		ITEM 64	
	Pile Driving Templates And Followers: Bidder shall include Lump Sum		Perform Work Associated With Regulatory Agency Changes Lump Sum	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 100,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00
1 Manson Construction Co.	\$ 100,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 100,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00
1) AVERAGE BID	\$ 100,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00
2) STANDARD DEVIATION	\$ -	\$ -	\$ -	\$ -
3) ENG. EST. - LOW BIDDER	\$ -	\$ -	\$ -	\$ -

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PROJ. CONST. MGR.: PHONG NGO

	Allowance Item 65		Allowance Item 66	
	ITEM 65		ITEM 66	
	Underwater Rock Removal: Bidder shall include in the bid		Emergency On-Call Work: Bidder shall include in the bid the	
	Lump Sum		Lump Sum	
	1		1	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 100,000.00	\$ 100,000.00	\$ 150,000.00	\$ 150,000.00
1 Manson Construction Co.	\$ 100,000.00	\$ 100,000.00	\$ 150,000.00	\$ 150,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 100,000.00	\$ 100,000.00	\$ 150,000.00	\$ 150,000.00

1) AVERAGE BID	\$ 100,000.00	\$ 100,000.00	\$ 150,000.00	\$ 150,000.00
2) STANDARD DEVIATION	\$ -	\$ -	\$ -	\$ -
3) ENG. EST. - LOW BIDDER	\$ -	\$ -	\$ -	\$ -

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PROJ. CONST. MGR.: PHONG NGO

	Allowance Item 67		Allowance Item 68	
	ITEM 67		ITEM 68	
	Seawall Repair: Bidder shall include in the bid the listed Lump Sum		Miscellaneous Demolition, Removals, and Disposal: Bidder Lump Sum	
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 150,000.00	\$ 150,000.00	\$ 100,000.00	\$ 100,000.00
1 Manson Construction Co.	\$ 150,000.00	\$ 150,000.00	\$ 100,000.00	\$ 100,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 150,000.00	\$ 150,000.00	\$ 100,000.00	\$ 100,000.00
1) AVERAGE BID	\$ 150,000.00	\$ 150,000.00	\$ 100,000.00	\$ 100,000.00
2) STANDARD DEVIATION	\$ -	\$ -	\$ -	\$ -
3) ENG. EST. - LOW BIDDER	\$ -	\$ -	\$ -	\$ -

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PROJ. CONST. MGR.: PHONG NGO

	Allowance Item 69		Allowance Item 70	
	ITEM 69		ITEM 70	
	Perform Miscellaneous Improvements and Structures Work:		Unforeseen Utility and Substructure Additions, Modifications,	
	Lump Sum		Lump Sum	
	1	1	1	1
	Unit Price	Extended Price	Unit Price	Extended Price
ENGINEERING ESTIMATE	\$ 100,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00
1 Manson Construction Co.	\$ 100,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00
2 Drill Tech Drilling & Shoring, Inc	\$ 100,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00
1) AVERAGE BID	\$ 100,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00
2) STANDARD DEVIATION	\$ -	\$ -	\$ -	\$ -
3) ENG. EST. - LOW BIDDER	\$ -	\$ -	\$ -	\$ -

SHAUN SHAHRESTANI
 Chief Harbor Engineer
 Director of Construction