

LSJ Cable Installation Bid Tabulation

Item No.	Item	Pirelli	Remarks
1	Marine Survey/Report	\$ 49,896	
2	Cable Transfer	\$ 35,640	
3	Mobilization/Demobilization	\$ 35,640	
4	Marine Installation	\$ 203,148	
5	LSJ Cable Protectors	\$ 47,100	
6	St. Thomas Cable Protectors	\$ 11,775	
7	LSJ Trenching/Vault	\$ 35,000	See note 1 and 2
8	LSJ Landside Cable Installation	\$ 13,600	
9	St. Thomas Trenching	\$ 15,000	See note 1 and 2
10	St. Thomas Landside Installation	\$ 11,600	
11	Cable Testing	\$ 17,820	
12	As-laid Drawings	\$ 14,256	
	Subtotal of Cable Installation Bid:	\$ 490,475	
	Additional Owner Expense:	\$ 840,500	See Note 3 and 4.
	Total Cable Material and Installation Costs:	\$ 1,330,975	

Notes:

- Based on budget values provided by local subcontractors.
- Items in italics completed by Pirelli include reduction in cost based on a combination of Cable installer and Owner's Contractor efforts.
- Cost for spare cable splice kit (\$138,900) has been omitted from the itemized list total as purchase of this item may be delayed or omitted altogether as standby generator capability will be provided in the event the cable is damaged.
- Cost for items 2, 3, and 4 from the attached add'l installation cost table possibly to be omitted pending disposition of spare cable. Cost of Item 12 - spare cable reel, may also possibly be omitted as this will become WAPA's responsibility. The exclusion of these four items from owner's costs could reduce the additional installation costs to \$777,500, which would be a reduction of \$63,000, and would reduce the Total Cable Material and Installation Costs to \$1,267,975.

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St. Thomas to LSJ Cable Installation (costs additional to Cable Installation Bids)

Item No.	Item	Quantity/Description	Installed by	Value ⁽¹⁾	Owner's Cost ⁽²⁾	Pricing Source	Remarks
Redhook							
1	WAPA Transformer/Hi-Pot	3-phase termination	WAPA	\$ 22,000	\$ 11,000	Estimate	Initial 13.2 kV source at St. Thomas
2	Underground Ductbank; Pole to Vault at Redhook beach	1100 ft., conc. Encased, 15 kV rated	WAPA	\$ 68,000	\$ 34,000	Estimate	Approximate length by WAPA
3	Redhook Vault	Pre-cast or cast in place	WAPA	\$ 18,000	\$ 9,000	Estimate	
4	Cable splices in Redhook beach vault	3 sets of splices	WAPA	\$ 20,000	\$ 10,000	Estimate	Splicing of St. John, LSJ, and WAPA feeders in WAPA Vault
5	VITELCO Fiber Optic Termination	F/O cable installation from vault to adjacent terminal cabinet	VITELCO	\$ 15,000	\$ 7,500	VITELCO	Required as a condition of service - VITELCO provides terminal installation and all equipment.
LSJ							
6	Primary feeders; vault to transformer	Direct bury 15kV; 150ft.	Owner's Contractor		\$ 6,500	Estimate	Work performed by electrician
7	Transformer Pad	Concrete, per WAPA spec.	Owner's Contractor		\$ 2,000	Estimate	Work performed by GC
8	Transformer	15kV primary - 5kV secondary	WAPA	\$ 18,000	\$ -	Estimate	Provided and installed by WAPA
9	VITELCO Fiber Optic Termination	F/O cable installation from vault to adjacent terminal cabinet	VITELCO	\$ 25,000	\$ 12,500	VITELCO	Required as a condition of service - VITELCO provides terminal installation and all equipment. Includes allowance for trenching
Cable Incidentals							
10	Spare submarine repair splices	Two complete splice assy's	none	\$ 138,900	\$ 138,900	Bid Received	P-J Quotation
11	Cable storage allowance	Demurrage at Pensacola, Florida	none	\$ 6,000	\$ 6,000	Estimate	2 month allowance per P-J
12	Spare storage reel	Left over cable, delivered to WAPA	none		\$ 10,000	Estimate	To be finalized after installation
Professional Services							
13	Globaltech	Project management, Installation oversight, engineering, agency coord.			\$ 98,000	Contract	Not to exceed, per agreement 10-17-02, less \$50,000 w/o design/drawings
14	BioImpact	Marine surveys, permitting assistance		\$ 14,000	\$ 14,000	Proposal	
15	BCA, Ltd.	Cable test witness			\$ 9,000	Invoice	
16	Legal Fees				\$ 75,000	Estimate	
Agency Fees							
17	CZM				\$ 1,000		Permit fees
18	Corp of Engineers				\$ -		No permit fees
19	NRP (Submerged Lands)				\$ -		No upfront fees - periodic rental pmts.

St. Thomas to LSJ Cable Installation (costs additional to Cable Installation Bids)

Item No.	Item	Quantity/Description	Installed by	Value ⁽¹⁾	Owner's Cost ⁽²⁾	Pricing Source	Remarks
	Cable Cost						
20	Cable Cost	18,000 feet Power/FO Cable		\$ 535,000	\$ 535,000		Based on actual purchase price

Notes: Total Cost = \$ 979,400

- 1 Value based on estimate of costs using standard job costing methods.
- 2 Owner's cost based on value estimate (or partial contribution) unless specific bid has been received or contract price has been negotiated

MEMORANDUM*Globaltech, Inc.*

TO: Darren Indyke, Esq.

COPY: Charles Miller/Miller & Raved, Inc.

FROM: Paul Gandy/Globaltech, Inc.

DATE: 4/4/2003

SUBJECT: LSJ – Cable Recommendations

We have reviewed the latest proposal from Pirelli High Voltage Systems – Submarine Group (formerly Pirelli-Jacobson) which allows for installation of cable protectors at LSJ and Red Hook by Owner's forces under supervision of Pirelli's onsite personnel. The purpose of this quotation is to allow the Owner to realize a cost savings by using his own subcontractor while at the same time maintaining warranty coverage of the cable integrity. I have included in the attachments a copy of my telephone conversation log with Pietro Mondini concerning this latest proposal.

We currently have a turnkey cost proposal from Pirelli to complete this work with their forces as a part of the cable installation scope of services (see attached LSJ Cable Installation Bid Tabulation). In order for us to determine the cost savings of having the installation work completed by the Owner's subcontractor we need a firm quote for the installation work from the installing subcontractor. We have attempted to do this however, the marine subcontractors we have spoken with are extremely reticent to provide a firm quotation because the exact route and bottom conditions have not been established. These conditions can not be known in detail until a marine survey (which is part of the turnkey installation contract) has been prepared, with the laying route and landing coordinates noted, and the specific anchoring conditions of the CZM determined. We have requested a quotation based on assumptions of bottom conditions however this will not yield a firm price until the conditions are known for sure. A marine survey will be the first task to be completed by Pirelli once a notice to proceed has been completed.

We do not recommend proceeding with a separate marine survey for the purpose of refining the installation quotation as the cost of the, at \$49,000 or greater, survey will equal, or exceed, the level of refinement we would expect to achieve. Additionally, should there be a delay in the installation a new marine survey may be required by the installing contractor prior to installation.

In the attached Installation Bid Tabulation (first bid column, Pirelli) the following items have been identified as items in which the Owner's subcontractor could complete the work

at a potential savings and for which Pirelli has indicated a willingness to relinquish that scope item (or portions thereof) from their contract:

- Item 5: LSJ Cable Protectors
- Item 6: St. Thomas Cable Protectors (Red Hook area)
- Item 7: LSJ Trenching/Vault
- Item 9: St. Thomas Trenching.

Items in italics reflect the total amount for activities where the installing contractor can be expected to share the effort with the Owner's sub-contractor for a net savings. Areas where we continue to find a potential for savings are:

- Installation of cable protectors using the Owner's marine contractor of supervision of Pirelli personnel
- Purchase of cable protectors directly at less than half the cost quoted by Pirelli (\$50/ft. vs \$136/ft.)
- Near shore and onshore excavation and vault installation

In Pirelli's proposal, dated November 26, 2002, they have provided firm fixed costs for these activities, assuming the worst case of what they know to be the marine and land conditions with the exception of costs for rock removal during excavation (unknown until marine survey and landing conditions are known). In our subsequent requests for information, justification, and unit costs Pirelli has left the door open for modifications to their scope after a notice to proceed has been issued and have further indicated a willingness to eliminate certain near shore and landside activities from the contract. For each of these activities we have a line item cost and various unit costs for sharing of responsibilities. While some of these costs seem excessive they provide a basis for subsequent modifications (additions or deletions) to the contract.

As you know, in subsequent discussions, Pirelli has indicated no willingness to reduce the amounts quoted for Marine Survey/Report, Cable Transfer, Mobilization/Demobilization, Marine Installation, Cable Testing, or As-laid Drawings.

In order to have an accurate estimate of the marine cable installation costs to form a basis for notice to proceed, and in the interest of keeping pace with the permitting and installation schedule (ahead of hurricane season) we recommend issuing a notice to proceed based on the item costs contained in the attached Installation Bid Tabulation (\$490,475 +/-). We further recommend that the final proposal from Pirelli contain allowances for Owner's work and associated unit prices contained in the various proposals from Pirelli as follows:

- Email proposal dated 3/12/03 (attached)

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- Email proposal modification dated 2/04/03 (attached)
- Letter proposal dated 11/26/02 (attached)

In addition to the above items, we should request from Pirelli a unit cost for rock removal to minimize costs due to "unforeseen conditions".

We believe this notice to proceed will allow for mobilization of the activities necessary to prepare for cable installation while affording the Owner the opportunity to lower the costs of various aspects of the installation contract once the specific marine conditions have been ascertained.

The contract should contain provisions for execution of work by the Owner's forces. Some typical language that we have employed in the past is presented below:

"ARTICLE 6
CONSTRUCTION BY OWNER OR
BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD
SEPARATE CONTRACTS

6.1.1 *The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these.*

6.1.2 *When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents, in each case, shall mean the Contractor who executes each separate Owner-Contractor Agreement.*

6.1.3 *The Owner shall provide for coordination of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule and Contract Sum deemed necessary after a joint review and mutual agreement and based on unit or lump sum prices provided in the proposal. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised.*

6.1.4 *Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations and to have the same rights which apply to the Contractor under the Conditions of the Contract..*

6.2 MUTUAL RESPONSIBILITY

6.2.1 *The Contractor shall afford the Owner and separate contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.*

6.2.2 *If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Owner apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor to report shall constitute an acknowledgment that the Owner's or separate contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.*

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6.2.3 Costs caused by delays or by improperly timed activities or defective construction shall be borne by the party responsible thereof.

6.2.4 The Contractor shall promptly remedy damage wrongfully caused by the Contractor to completed or partially completed construction or to property of the Owner or separate contractors .

These provisions will need to be modified as required for the specific project.

LSJ Cable Installation Bid Tabulation						
Item No.	Item	Pirelli	Pirelli (Stand-alone) ⁽⁴⁾	Global Marine Systems	Durocher Marine	Remarks
1	Marine Survey/Report	\$ 49,896	\$ 57,000	\$ 130,000		
2	Cable Transfer	\$ 35,640	Incl. in Item 3	\$ 110,000		
3	Mobilization/Demobilization	\$ 35,640	\$ 471,500	\$ 35,000		
4	Marine Installation	\$ 203,148	\$ 198,000	\$ 250,000		
5	LSJ Cable Protectors	\$ 47,100	\$ 47,100	\$ 43,500		
6	St. Thomas Cable Protectors	\$ 11,775	\$ 11,775	\$ 14,500		
7	LSJ Trenching/Vault	\$ 35,000	\$ 35,000	\$ 10,000		GMS items 7 & 8 combined, see note 2
8	LSJ Landside Cable Installation	\$ 13,600	\$ 13,600	Included		
9	St. Thomas Trenching	\$ 15,000	Incl. in Item 7	\$ 6,000		
10	St. Thomas Landside Installation	\$ 11,600	\$ 11,600	Included		GMS items 9 & 10 combined, see note 2
11	Cable Testing	\$ 17,820	\$ 20,000	\$ 17,820		See Note 3
12	As-laid Drawings	\$ 14,256	\$ 14,000	\$ 5,000		
	Subtotal of Cable Installation Bids:	\$ 490,475	\$ 879,575	\$ 621,820	\$ 800,000	Derochure Marine lump sum, see corresp.
	Additional Owner Expense:	\$ 840,500	\$ 840,500	\$ 840,500	\$ 979,400	See attached itemized list. See Note 5.
	Total Cable Material and Installation Costs:	\$ 1,330,975	\$ 1,720,075	\$ 1,462,320	\$ 1,779,400	

Notes:

1. NI = Not included.
2. Based on budget values provided by local subcontractors.
3. P-J value for testing applied to GMS quote as Pirelli factory has not been forthcoming with information for competitor request.
4. Items in italics completed include reduction in cost based on a combination of Cable installer and Owner's Contractor efforts.
5. Cost for spare cable splice kit (\$138,900) has been omitted from the itemized list total as purchase of this item may be delayed or omitted altogether as standby generator capability will be provided in the event the cable is damaged.

<p>840,500 535,000 <u>305,500</u></p>	<p>840,500 138,900 <u>979,400</u></p>
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