

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES
			J	1 5
2. AMENDMENT/MODIFICATION NO. 0003	3. EFFECTIVE DATE 25-Aug-2004	4. REQUISITION/PURCHASE REQ. NO. W25PHS-4184-0392		5. PROJECT NO.(If applicable)
6. ISSUED BY US ARMY ENGINEER DISTRICT, PHILADELPHIA CONTRACTING DIVISION WANAMAKER 100 PENN SQUARE EAS PHILADELPHIA PA 19107-3390	CODE W912BU	7. ADMINISTERED BY (If other than item 6) US ARMY ENGINEER DISTRICT, PHILADELPHIA POC: CHERITA WILLIAMS WANAMAKER BUILDING 100 PENN SQUARE PHILADELPHIA PA 19107-3390		CODE E5CTSCLW
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)			X	9A. AMENDMENT OF SOLICITATION NO. W912BU-04-B-0026
			X	9B. DATED (SEE ITEM 11) 03-Aug-2004
				10A. MOD. OF CONTRACT/ORDER NO.
				10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS				
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input checked="" type="checkbox"/> is extended, <input type="checkbox"/> is not extended.				
Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning <u>1</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.				
12. ACCOUNTING AND APPROPRIATION DATA (If required) Provide One Triple Screw Steel Towboat				
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.				
X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.			
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).			
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:			
	D. OTHER (Specify type of modification and authority)			
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.				
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) The following is Amendment 0003 for Solicitation W912BU-04-B-0026 to Provide One Triple Screw Steel Towboat. Please indicate receipt of this Amendment on Standard Form 33 (Solicitation, Offer, Award) as Amendment 0003. Failure to acknowledge all Amendments may be a cause for rejection of bid. The bid opening date is hereby extended for 14 days from Sept 2, 2004 to Sept 16, 2004. (Amendment Number 0003 continued on next page.)				
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.				
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
		TEL: _____ EMAIL: _____		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED	
_____ (Signature of person authorized to sign)		BY _____ (Signature of Contracting Officer)		

C006 SCOPE OF WORK

A. CONTRACTOR'S RESPONSIBILITY

The contract consists of three phases:

Phase I..... Planning
Phase II..... Engineering & Scheduling
Phase II..... Construction, Testing & Delivery

In accordance with the three phases, the Contractor assumes complete responsibility for designing, building, testing, and delivering the vessel to meet the requirements of this contract. Should the Contractor determine at any time that he is unable to fulfill those responsibilities, he shall notify the COR immediately of the problem experienced and his proposed manner of correction.

B. PROPULSION DESIGN SUBCONTRACTOR

The towboat concept designs presented in this package have been generated by CT Marine. The designs utilize CT Marine's extensive knowledge base of towboat design and similar towboats constructed.

~~The Contractor shall retain CT Marine to provide design input to the contractor's final design, and also to conduct inspection of specific construction and fabrication areas.~~

~~CT Marine shall be retained for the following tasks:~~

- ~~Preparing All~~ all propeller design calculations.
- Review of Strut final detailed design.
- Review of Nozzle final detailed design.
- Review of Nozzle Installation final detailed design.
- Review of Shafting final detailed design.
- Review of Steering and Flanking rudder final detailed design.
- Review of Steering and Flanking rudder steering linkage final detailed design.
- Inspection of Nozzle and Strut construction.
- Inspection of Nozzle and Strut installation.
- Inspection of Flanking and Steering rudder and steering linkage and gear installations.

The contractor shall coordinate specific drawing and calculation requirements for these tasks with CT Marine. The contractor shall also coordinate inspection dates as required for these tasks with CT Marine.

C410 HULL OUTFIT

A. DRAWINGS

Contract Drawings

- #678-B105-01 LINES PLAN
- #678-B205-01 OUTBOARD PROFILE
- #678-B215-01 GENERAL ARRANGEMENT
- #678-B301-01 INBOARD LONGITUDINAL ELEVATION

~~Reference Drawing~~

~~————#518-D410-02 RUBBER FENDERING~~

B. TOWKNEES

Two towknees shall be provided and installed at the bow at the locations shown on the above contract drawings. The towknees shall not extend forward of the headlog.

The towknees shall be designed and installed to be integral with the hull structure. Calculations shall be submitted with the structural design drawings for the towknees to verify the towknee design.

Each towknee shall be constructed and structurally reinforced to allow for stowage of equipment inside the towknees. Each towknee shall be open on the inboard and outboard sides. Openings shall have radius corners and a flat bar cap or ring shall be welded to the perimeter of each of the towknee openings.

Each towknee shall be faced with replaceable tow-knee pusher plates (rubber pads vulcanized to steel plates) similar to Johnson Duramax part numbers DB-1409 and DB-1609.

Each towknee shall be fitted with 30 inch wide steps on the inboard side of the towknee. Each side of the steps on each towknee shall be outfitted with a two course railing fabricated from 1-1/4 inch IPS pipe. The top railings shall be 42 inches above the deck and the middle railings shall be 20 inches above the deck.

C606 PROPELLERS & NOZZLES

A. CONTRACT DRAWINGS

#678-B605-01 PROPULSION & SHAFTING ARRANGEMENT
#678-B615-01 STEERING LINKAGE & STRUT DETAILS

B. CONTRACT DESIGN SELECTION

During Contract Design, calculations showed that the following propellers would be appropriate for use on the vessel:

- 5 blade
- 52 inch diameter
- Inboard turning (Center propeller rotation shall match that of port side.)
- 61 inch variable pitch
- Modified Kaplan style with CT Marine 'Type 28' Kort Nozzles

C. DETAILED DESIGN SELECTION

~~The~~ In accordance with Contract Clause C006, the Contractor shall ~~prepare~~ provide propeller calculations to finalize the selection of the propellers. The calculations shall utilize the engine power and gear ratio selected by the Contractor.

The calculations shall be submitted to the COR for review prior to purchase by the Contractor.

The propellers provided shall be:

1. Five-bladed, 52 inch diameter, similar to Modified Kaplan Style with CT Marine 'Type 28' Kort Nozzles.
2. The pitch and DAR shall be determined as required for a design speed of 6 mph.
3. Constructed of material similar to either Aqualoy (MnNiAlBr) or ABS CF-3 Stainless Steel.
4. Double-sided, anti-singing edges.
5. Two of the propellers shall be right hand and one shall be left hand.

PART III
LIST OF DOCS, EXHIBITS AND ATTACHMENTS
SECTION J

J01 CONTRACT & REFERENCE DRAWINGS

The following drawings shall form a part of this solicitation. All drawings will be provided to the successful bidder in electronic file form.

A. CONTRACT DRAWINGS

Drawing Number	Title	Revision
678-B000-01	COVER SHEET	0
678-B105-01	LINES PLAN	0
678-B105-02	FORWARD FRAME SECTIONS AND OFFSETS	0
678-B105-03	AFT FRAME SECTIONS AND OFFSETS	0
678-B130-01	TANK CAPACITY & VOID ARRANGEMENT	0
678-B205-01	OUTBOARD PROFILE	0
678-B215-01	GENERAL ARRANGEMENT	0
678-B245-01	HOLD & MACHINERY ARRANGEMENT	0
0		
678-B301-01	INBOARD LONGITUDINAL ELEVATION	0
678-B306-01	TRANSVERSE & LONG'L STRUCTURAL SECTIONS	0
678-B307-01	BOTTOM SHELL & MAIN DECK STRUCTURE	0
678-B330-01	ENGINE & REDUCTION GEAR GIRDERS	0
678-B605-01	PROPULSION & SHAFTING ARRANGEMENT	0
678-B612-01	STEERING & FLANKING RUDDERS	0
678-B614-01	CT MARINE 'TYPE 28' KORT NOZZLE	0
678-B615-01	STEERING LINKAGE & STRUT DETAILS	0

B. REFERENCE DRAWINGS

Drawing Number	Title	Revision
518-D410-02	RUBBER FENDERING	0
518-D472-01	TRANSDUCER WELL	0
518-D669-01	DRAINAGE SYSTEM	0
518-D692-01	GENERAL ALARM SYSTEM	0
518-D692-02	BILGE ALARM SYSTEM SCHEMATIC	0
603-D720-02	ONE-LINE DIAGRAM (DC)	0