

SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS <i>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30</i>				1. REQUISITION NO. W81G67-0312-4957	PAGE 1 OF 50	
2. CONTRACT NO.	3. AWARD/EFFECTIVE DATE	4. ORDER NO.	5. SOLICITATION NO. DACW37-01-Q-0009	6. SOLICITATION ISSUE DATE 11 DEC 2000		
7. FOR SOLICITATION INFORMATION CALL		a. NAME LISA P STENSRUD	b. TELEPHONE NO. <i>(No collect calls)</i> 651-290-5416	8. OFFER DUE DATE/LOCAL TIME 10 JAN 2001		
9. ISSUED BY CONTRACTING DIVISION		CODE DACW37	10. THIS ACQUISITION IS <input type="checkbox"/> UNRESTRICTED <input checked="" type="checkbox"/> SET ASIDE:100 % FOR <input checked="" type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> SMALL DISADV. BUSINESS <input type="checkbox"/> 8(A) SIC: 3599 SIZE STD: 500 EMPLOYEES	11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE <input type="checkbox"/> 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	12. DISCOUNT TERMS	
USACE – ST PAUL 190 5 TH STREET ST PAUL, MN 55101-1638			13b. RATING	14. METHOD OF SOLICITATION <input checked="" type="checkbox"/> RFQ <input type="checkbox"/> IFB <input type="checkbox"/> RFP		
15. DELIVER TO SEE SCHEDULE		CODE	16. ADMINISTERED BY SEE ITEM 9		CODE	
17a. CONTRACTOR/OFFEROR	CODE	FACILITY CODE	18a. PAYMENT WILL BE MADE BY			
TELEPHONE NO.			18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM			
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER						
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES		21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	SEE SCHEDULE					
<i>(Attach Additional Sheets as Necessary)</i>						
25. ACCOUNTING AND APPROPRIATION DATA					26. TOTAL AWARD AMOUNT <i>(For Govt. Use Only)</i>	
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4. FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED.						
<input type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED.						
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 2 COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN. <input type="checkbox"/>				29. AWARD OF CONTRACT: REFERENCE _____ OFFER DATED _____. YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS: <input type="checkbox"/>		
30a. SIGNATURE OF OFFEROR/CONTRACTOR			31a. UNITED STATES OF AMERICA <i>(SIGNATURE OF CONTRACTING OFFICER)</i>			
30b. NAME AND TITLE OF SIGNER <i>(TYPE OR PRINT)</i>		30c. DATE SIGNED	31b. NAME OF CONTRACTING OFFICER <i>(TYPE OR PRINT)</i>		31c. DATE SIGNED	
32a. QUANTITY IN COLUMN 21 HAS BEEN <input type="checkbox"/> RECEIVED <input type="checkbox"/> INSPECTED <input type="checkbox"/> ACCEPTED AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED			33. SHIP NUMBER <input type="checkbox"/> PARTIAL	34. VOUCHER NUMBER		35. AMOUNT VERIFIED CORRECT FOR
32b. SIGNATURE OF AUTHORIZED GOVT REPRESENTATIVE			36. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/>		37. CHECK NUMBER	
32c. DATE			38. S/R ACCOUNT NO.	39. S/R VOUCHER NO.	40. PAID BY	
41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT			42a. RECEIVED BY <i>(Print)</i>			
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER		41c. DATE	42b. RECEIVED AT <i>(Location)</i>			
			42c. DATE REC'D <i>(YY/MM/DD)</i>	42d. TOTAL CONTAINERS		

SECTION SF 1449 CONTINUATION SHEET

BASIC CONTRACT ITEMS:

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	HYDRAULIC TOW HAULAGE UNIT (INC SPARE PARTS, TESTING) - TO SUPPLY TOW HAULAGE UNITS AND SPARE PARTS IN ACCORDANCE WITH ATTACHMENT (1) - STATEMENT OF WORK. DELIVERY REQUIRED WITHIN EIGHTEEN (18) MONTHS AFTER CONTRACT AWARD. ALL PRICING INCLUDES SHIPPING COSTS--FOB DESTINATION.				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AA	HYDRAULIC TOW HAULAGE UNIT	2.00	Each		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AB	SPARE PARTS	2.00	Lot		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AC	WITNESS TEST	1.00	Lot		

TOTAL BASIC CONTRACT ITEMS \$ _____

OPTION ITEMS:

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	<p>OPTION 1: HYDRAULIC TOW HAULAGE UNIT INC. SPARE PARTS - TO SUPPLY TOW HAULAGE UNITS AND SPARE PARTS IN ACCORDANCE WITH ATTACHMENT (1) - STATEMENT OF WORK. OPTION TO BE EXERCISED AT THE GOVERNMENT'S DISCRETION ANYTIME AFTER CONTRACT AWARD THROUGH 31 DEC 2005. DELIVERY REQUIRED WITHIN TWELVE (12) MONTHS AFTER OPTION EXERCISED. ALL PRICING INCLUDES SHIPPING COSTS--FOB DESTINATION.</p>				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AA	HYDRAULIC TOW HAULAGE UNIT	1.00	Each		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AB	SPARE PARTS	1.00	Lot		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	<p>OPTION 2: HYDRAULIC TOW HAULAGE UNIT INC. SPARE PARTS - TO SUPPLY TOW HAULAGE UNITS AND SPARE PARTS IN ACCORDANCE WITH ATTACHMENT (1) -STATEMENT OF WORK. OPTION TO BE EXERCISED AT THE GOVERNMENT'S DISCRETION ANYTIME AFTER CONTRACT AWARD THROUGH 31 DEC 2005. DELIVERY REQUIRED WITHIN TWELVE (12) MONTHS AFTER OPTION EXERCISED. ALL PRICING INCLUDES SHIPPING COSTS--FOB DESTINATION.</p>				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AA	HYDRAULIC TOW HAULAGE UNIT	1.00	Each		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AB	SPARE PARTS	1.00	Lot		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004	<p>OPTION 3: HYDRAULIC TOW HAULAGE UNIT INC. SPARE PARTS - TO SUPPLY TOW HAULAGE UNITS AND SPARE PARTS IN ACCORDANCE WITH ATTACHMENT (1) -STATEMENT OF WORK. OPTION TO BE EXERCISED AT THE GOVERNMENT'S DISCRETION ANYTIME AFTER CONTRACT AWARD THROUGH 31 DEC 2005. DELIVERY REQUIRED WITHIN TWELVE (12) MONTHS AFTER OPTION EXERCISED. ALL PRICING INCLUDES SHIPPING COSTS--FOB DESTINATION.</p>				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004AA	HYDRAULIC TOW HAULAGE UNIT	1.00	Each		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004AB	SPARE PARTS	1.00	Lot		
				<u>NOTE 1</u>	<u>NOTE 1</u>

Amendment 0001

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005	<p>OPTION 4: HYDRAULIC TOW HAULAGE UNIT INC. SPARE PARTS - TO SUPPLY TOW HAULAGE UNITS AND SPARE PARTS IN ACCORDANCE WITH ATTACHMENT (1) -STATEMENT OF WORK. OPTION TO BE EXERCISED AT THE GOVERNMENT'S DISCRETION ANYTIME AFTER CONTRACT AWARD THROUGH 31 DEC 2005. DELIVERY REQUIRED WITHIN TWELVE (12) MONTHS AFTER OPTION EXERCISED. ALL PRICING INCLUDES SHIPPING COSTS--FOB DESTINATION.</p>				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005AA	HYDRAULIC TOW HAULAGE UNIT	1.00	Each		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005AB	SPARE PARTS	1.00	Lot		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006	<p>OPTION 5: HYDRAULIC TOW HAULAGE UNIT INC. SPARE PARTS - TO SUPPLY TOW HAULAGE UNITS AND SPARE PARTS IN ACCORDANCE WITH ATTACHMENT (1) - STATEMENT OF WORK. OPTION TO BE EXERCISED AT THE GOVERNMENT'S DISCRETION ANYTIME AFTER CONTRACT AWARD THROUGH 31 DEC 2005. DELIVERY REQUIRED WITHIN TWELVE (12) MONTHS AFTER OPTION EXERCISED. ALL PRICING INCLUDES SHIPPING COSTS--FOB DESTINATION.</p>				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006AA	HYDRAULIC TOW HAULAGE UNIT	1.00	Each		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006AB	SPARE PARTS	1.00	Lot		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0007	<p>OPTION 6: HYDRAULIC TOW HAULAGE UNIT INC. SPARE PARTS - TO SUPPLY TOW HAULAGE UNITS AND SPARE PARTS IN ACCORDANCE WITH ATTACHMENT (1) -STATEMENT OF WORK. OPTION TO BE EXERCISED AT THE GOVERNMENT'S DISCRETION ANYTIME AFTER CONTRACT AWARD THROUGH 31 DEC 2005. DELIVERY REQUIRED WITHIN TWELVE (12) MONTHS AFTER OPTION EXERCISED. ALL PRICING INCLUDES SHIPPING COSTS--FOB DESTINATION.</p>				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0007AA	HYDRAULIC TOW HAULAGE UNIT	1.00	Each		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0007AB	SPARE PARTS	1.00	Lot		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0008	<p>OPTION 7: HYDRAULIC TOW HAULAGE UNIT INC. SPARE PARTS - TO SUPPLY TOW HAULAGE UNITS AND SPARE PARTS IN ACCORDANCE WITH ATTACHMENT (1) -STATEMENT OF WORK. OPTION TO BE EXERCISED AT THE GOVERNMENT'S DISCRETION ANYTIME AFTER CONTRACT AWARD THROUGH 31 DEC 2005. DELIVERY REQUIRED WITHIN TWELVE (12) MONTHS AFTER OPTION EXERCISED. ALL PRICING INCLUDES SHIPPING COSTS--FOB DESTINATION.</p>				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0008AA	HYDRAULIC TOW HAULAGE UNIT	1.00	Each		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0008AB	SPARE PARTS	1.00	Lot		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009	<p>OPTION 8: HYDRAULIC TOW HAULAGE UNIT INC. SPARE PARTS - TO SUPPLY TOW HAULAGE UNITS AND SPARE PARTS IN ACCORDANCE WITH ATTACHMENT (1) - STATEMENT OF WORK. OPTION TO BE EXERCISED AT THE GOVERNMENT'S DISCRETION ANYTIME AFTER CONTRACT AWARD THROUGH 31 DEC 2005. DELIVERY REQUIRED WITHIN TWELVE (12) MONTHS AFTER OPTION EXERCISED. ALL PRICING INCLUDES SHIPPING COSTS--FOB DESTINATION.</p>				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009AA	HYDRAULIC TOW HAULAGE UNIT	1.00	Each		
				<u>NOTE 1</u>	<u>NOTE 1</u>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009AB	SPARE PARTS	1.00	Lot		
				<u>NOTE 1</u>	<u>NOTE 1</u>

NOTE 1:

PRICING FOR OPTIONAL LINE ITEMS WILL BE DETERMINED BY THE CALENDAR YEAR THE OPTION ITEM IS EXERCISED AS FOLLOWS (**QUOTER TO COMPLETE THE FOLLOWING AND SUBMIT WITH QUOTATION**):

CALENDAR YEAR*	SUPPIES/SERVICES	UNIT	UNIT PRICE
2001	HYDRAULIC TOW HAULAGE UNIT EACH		<u>\$SAME AS SLIN 0001AA</u>
2001	SPARE PARTS	LOT	<u>\$SAME AS SLIN 0001AB</u>
2002	HYDRAULIC TOW HAULAGE UNIT EACH		<u>\$</u>
2002	SPARE PARTS	LOT	<u>\$</u>
2003	HYDRAULIC TOW HAULAGE UNIT EACH		<u>\$</u>
2003	SPARE PARTS	LOT	<u>\$</u>
2004	HYDRAULIC TOW HAULAGE UNIT EACH		<u>\$</u>
2004	SPARE PARTS	LOT	<u>\$</u>
2005	HYDRAULIC TOW HAULAGE UNIT EACH		<u>\$</u>
2005	SPARE PARTS	LOT	<u>\$</u>

*CALENDAR YEAR ENCOMPASSES THE DATES OF JANUARY 1 THROUGH DECEMBER 31.

NOTES TO QUOTERS:

1. ORIGINAL AND TWO (2) COPIES OF THE QUOTATION INCLUDING THE REQUIRED TECHNICAL SUBMITTALS SHALL BE SUBMITTED NO LATER THAN 2:00 PM LOCAL TIME (CST), 10 JANUARY 2001 AT THE US ARMY CORPS OF ENGINEERS, 190 5TH STREET EAST, ST PAUL MN 55101-1638, ATTN: LISA STENSRUD. MARK THE OUTSIDE PACKAGING OF QUOTATIONS WITH THE SOLICITATION NUMBER, DACW37-01-Q-0009. FACSIMILE OF QUOTATIONS AND FACSIMILE OF MODIFICATIONS THERETO, WILL NOT BE ACCEPTED.
2. BLOCK 10 ON THE STANDARD FORM 1449 IS REVISED TO SHOW A NAICS CODE OF 333999 RATHER THAN SIC CODE 3599. THE SIZE STANDARD REMAINS UNCHANGED.
3. AWARD SELECTION WILL BE BASED ON THE LOWEST PRICE TECHNICALLY ACCEPTABLE QUOTATION. THE CRITERIA CONTAINED IN CLAUSE 52.212-2 EVALUATION – COMMERCIAL ITEMS, MUST BE ADDRESSED BY THE QUOTERS IN THEIR QUOTATION SUBMITTAL.
4. THE APPARENT SUCCESSFUL QUOTER MAY BE REQUESTED TO PROVIDE THE FOLLOWING INFORMATION AS SOON AS POSSIBLE AFTER THE QUOTATION DUE DATE:
 - a. A FINANCIAL STATEMENT, TO INCLUDE A BALANCE SHEET AND INCOME STATEMENT, AND
 - b. A BANK CERTIFICATION OF FINANCIAL CAPABILITY (LINE OF CREDIT).

THIS INFORMATION WILL BE TREATED AS CONFIDENTIAL. THE FINANCIAL STATEMENTS SHOULD NOT BE OVER 60 DAYS OLD. IF OVER 60 DAYS OLD, A CERTIFICATION SHOULD BE ATTACHED STATING THAT THE FINANCIAL CONDITION OF THE FIRM IS SUBSTANTIALLY THE SAME OR, IF NOT THE SAME, THE CHANGES THAT HAVE TAKEN PLACE.

5. ALL EXTENSIONS OF THE UNIT PRICES SHOWN WILL BE SUBJECT TO VERIFICATION BY THE GOVERNMENT. IN CASE OF A DISCREPANCY BETWEEN THE UNIT PRICE AND THE EXTENSION, THE UNIT PRICE WILL PREVAIL.
6. THE GOVERNMENT MAY DETERMINE THAT A QUOTATION IS UNACCEPTABLE IF THE PRICES PROPOSED ARE MATERIALLY UNBALANCED BETWEEN LINE ITEMS OR SUBLINE ITEMS AND THE LACK OF BALANCE IS DETERMINED BY THE CONTRACTING OFFICER TO POSE AN UNACCEPTABLE RISK TO THE GOVERNMENT. A QUOTATION IS MATERIALLY UNBALANCED WHEN IT IS BASED ON PRICES SIGNIFICANTLY LESS THAN COST FOR SOME WORK AND PRICES WHICH ARE SIGNIFICANTLY OVERSTATED IN RELATION TO COST FOR OTHER WORK, AND IF THERE IS A REASONABLE DOUBT THAT THE QUOTATION WILL RESULT IN THE LOWEST OVERALL COST TO THE GOVERNMENT, EVEN THOUGH IT MAY BE THE LOW EVALUATED QUOTATION, OR IT IS SO UNBALANCED AS TO BE TANTAMOUNT TO ALLOWING AN ADVANCE PAYMENT.
7. THE GOVERNMENT CONTEMPLATES AWARD OF A FIRM FIXED PRICE TYPE CONTRACT RESULTING FROM THIS SOLICITATION.
8. THE ANTICIPATED AWARD DATE FOR THIS REQUIREMENT IS **29 JANUARY 2001**.
9. ANY QUESTIONS REGARDING THE SOLICITATION, DRAWINGS, SPECIFICATIONS, ETC. MUST BE SUBMITTED IN WRITING NOT LATER THAN 2:00 PM LOCAL TIME, WEDNESDAY, 3 JANUARY 2001. QUESTIONS CAN BE FAXED TO (651)290-5706, ATTENTION TO LISA STENSRUD OR E-MAILED TO Lisa.P.Stensrud@mvp02.usace.army.mil . QUESTIONS RECEIVED AFTER THE DEADLINE MAY NOT BE ANSWERED PRIOR TO QUOTATION SUBMITTAL.

NOTES TO QUOTERS (cont'd):

10. THE APPARENT SUCCESSFUL QUOTER MUST BE REGISTERED IN THE CENTRAL CONTRACTOR REGISTRATION DATABASE. SEE CLAUSE 252.204-7004, REQUIRED CENTRAL CONTRACTOR REGISTRATION.
11. THE ADDRESSES, PHONE NUMBERS, AND INTERNET ADDRESSES (IF AVAILABLE) FOR REFERENCES CITED IN THESE SPECIFICATIONS ARE LISTED IN THE CORPS OF ENGINEERS GUIDE SPECIFICATION (CEGS) 01090 SOURCES FOR REFERENCE PUBLICATIONS. CEGS 01090 IS AVAILABLE ON THE TECHINFO PAGE OF THE CORPS OF ENGINEERS HUNTSVILLE DISTRICT INTERNET SITE AT: <http://w2.hnd.usace.army.mil/>.
12. THE INFORMATION PROVIDED WITHIN THE QUOTATION SUBMITTAL WILL BE INCORPORATED BY REFERENCE TO THE CONTRACT AWARD DOCUMENT.
13. THIS SOLICITATION AND ANY FORTHCOMING AMENDMENTS WILL ONLY BE AVAILABLE ON THE USACE ST. PAUL DISTRICT WORLD WIDE WEB SITE AT <http://mvpwww.mvp.usace.army.mil/ebs/AdvertisedSolicitations.asp>. POTENTIAL QUOTERS ARE ENCOURAGED TO REGISTER FOR THE SOLICITATION AT THIS SITE SO E-MAIL NOTIFICATIONS CAN BE SENT UPON ISSUANCE OF THE SOLICITATION AND ANY AMENDMENTS. FAILURE TO REGISTER WILL RESULT IN NO E-MAIL NOTIFICATIONS. IT IS THE QUOTER'S RESPONSIBILITY TO CHECK THIS WEB SITE PERIODICALLY FOR UPDATES. THE E-MAIL MESSAGE NOTIFICATIONS ARE CONSIDERED A COURTESY AND MAY NOT BE RELIABLE BASED ON SYSTEM CONSTRAINTS. A CD-ROM WILL NOT BE PROVIDED UNLESS SPECIFICALLY REQUESTED IN WRITING VIA E-MAIL AT Lisa.P.Stensrud@mvp02.usace.army.mil OR VIA FACSIMILE AT 651-290-5706 TO THE ATTENTION OF LISA STENSRUD. ALL REQUESTS FOR CD-ROMS HAVE TO BE RECEIVED PRIOR TO JANUARY 5, 2001.
14. **THIS PROCUREMENT IS A SMALL BUSINESS SET-ASIDE.**
15. CONTRACT SUBLINE ITEMS 0001AA, 0001AB AND 0001AC ARE THE BASIC CONTRACT LINE ITEMS FOR CONTRACT AWARD. IT IS ANTICIPATED THAT TWO OPTION ITEMS (TWO HYDRAULIC TOW HAULAGE UNITS AND TWO LOTS OF SPARE PARTS) WILL BE EXERCISED EACH CALENDAR YEAR AFTER AWARD. HOWEVER, THE GOVERNMENT RESERVES THE RIGHT TO EXERCISE ANY OPTION ITEM AT ANY TIME IN CONJUNCTION WITH OR WITHOUT OTHER OPTION ITEMS. FOR EXAMPLE, ALL EIGHT OPTION ITEMS (8 HYDRAULIC TOW HAULAGE UNITS AND 8 LOTS OF SPARE PARTS) COULD BE EXERCISED AT ONE TIME. ANOTHER EXAMPLE, IS ONE OPTION ITEM (ONE HYDRAULIC TOW HAULAGE UNIT AND ONE LOT OF SPARE PARTS) COULD BE EXERCISED IN CALENDER YEAR 2002 AND NO OTHER OPTION ITEMS ARE EXERCISED THROUGHOUT THE LIFE OF THE CONTRACT. THERE ARE MANY OTHER POSSIBLE SCENARIOS. TO DETERMINE THE "LOWEST EVALUATED PRICE" FOR CONTRACT AWARD PURPOSES SEE CLAUSE 52.212-2 EVALUATION – COMMERCIAL ITEMS
16. EACH UNIT SHALL BE DELIVERED TO:

LOCK AND DAM 5A STORAGE BUILDING
W679 STATE HIGHWAY 35
FOUNTAIN CITY, WI 54629-7214

AS A MINIMUM THE PACKAGING OF EACH UNIT SHOULD HAVE A STOUT WOODEN BASE.

CLAUSES INCORPORATED BY REFERENCE:

52.203-3	Gratuities	APR 1984
52.203-6 Alt I	Restrictions On Subcontractor Sales To The Government (Jul 1995) – Alternate I	OCT 1995
52.204-4	Printing/Copying Double-Sided on Recycled Paper	AUG 2000
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	JUL 1995
52.214-34	Submission Of Offers In The English Language	APR 1991
52.214-35	Submission Of Offers In U.S. Currency	APR 1991
52.222-3	Convict Labor	AUG 1996
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	FEB 1999
52.222-35	Affirmative Action For Disabled Veterans And Veterans of the Vietnam Era	APR 1998
52.222-36	Affirmative Action For Workers With Disabilities	JUN 1998
52.222-37	Employment Reports On Disabled Veterans And Veterans Of The Vietnam Era	JAN 1999
52.225-13	Restrictions on Certain Foreign Purchases	JUL 2000
52.227-1	Authorization and Consent	JUL 1995
52.227-2	Notice And Assistance Regarding Patent And Copyright Infringement	AUG 1996
52.232-17	Interest	JUN 1996
52.233-3	Protest After Award	AUG 1996
52.242-13	Bankruptcy	JUL 1995
52.253-1	Computer Generated Forms	JAN 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.205-7000	Provisions Of Information To Cooperative Agreement Holders	DEC 1991
252.209-7003	Compliance With Veterans' Employment Reporting Requirements	MAR 1998
252.225-7002	Qualifying Country Sources As Subcontractors	DEC 1991
252.225-7012	Preference For Certain Domestic Commodities	AUG 2000
252.225-7016	Restriction On Acquisition Of Ball and Roller Bearings	AUG 1998
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	MAR 1998
252.247-7023	Transportation of Supplies by Sea	MAR 2000

CLAUSES INCORPORATED BY FULL TEXT

52.207-4 ECONOMIC PURCHASE QUANTITY--SUPPLIES (AUG 1987)

(a) Offerors are invited to state an opinion on whether the quantity(ies) of supplies on which bids, proposals or quotes are requested in this solicitation is (are) economically advantageous to the Government.

Each offeror who believes that acquisitions in different quantities would be more advantageous is invited to recommend an economic purchase quantity. If different quantities are recommended, a total and a unit price must be quoted for applicable items. An economic purchase quantity is that quantity at which a significant price break occurs. If there are significant price breaks at different quantity points, this information is desired as well.

OFFEROR RECOMMENDATIONS			
PRICE			
ITEM	QUANTITY	QUOTATION	TOTAL

(c) The information requested in this provision is being solicited to avoid acquisitions in disadvantageous quantities and to assist the Government in developing a data base for future acquisitions of these items. However, the Government reserves the right to amend or cancel the solicitation and resolicit with respect to any individual item in the event quotations received and the Government's requirements indicate that different quantities should be acquired.

(End of provision)

52.211-8 TIME OF DELIVERY (JUN 1997) ALTERNATE II (APR 1984)

(a) The Government requires delivery to be made according to the following schedule:

REQUIRED DELIVERY SCHEDULE

The contractor shall deliver the Basic Contract items 0001AA and 0001AB identified as two (2) hydraulic tow haulage units and two (2) sets of spare parts within eighteen (18) months after contract award. Delivery of basic contract items 0001AA and 0001AB cannot occur before the witness test is completed and approved by the Contracting Officer. The basic contract item 0001AC witness test shall be completed to allow for the timely delivery of items 0001AA and 0001AB.

The contractor shall deliver exercised optional line items within twelve (12) months after the effective date of the option award.

The Government will evaluate equally, as regards time of delivery, offers that propose delivery of each quantity within the applicable delivery period specified above. Offers that propose delivery that will not clearly fall within the applicable required delivery period specified above, will be considered nonresponsive and rejected. The Government reserves the right to award under either the required delivery schedule or the proposed delivery schedule, when an offeror offers an earlier delivery schedule than required above. If the offeror proposes no other delivery schedule, the required delivery schedule above will apply.

OFFEROR'S PROPOSED DELIVERY SCHEDULE

Item No.	Quantity	Within days after date of Contract award
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(b) The delivery dates or specific periods above are based on the assumption that the successful offeror will receive notice of award by 29 January 2001. Each delivery date in the delivery schedule above will be extended by the number of calendar days after the above date that the Contractor receives notice of award; provided, that the Contractor promptly acknowledges receipt of notice of award.

(End of clause)

52.212-1 INSTRUCTIONS TO OFFERORS--COMMERCIAL ITEMS (OCT 2000)

(a) North American Industry Classification System (NAICS) code and small business size standard. The NAICS code and small business size standard for this acquisition appear in Block 10 of the solicitation cover sheet (SF 1449). However, the small business size standard for a concern which submits an offer in its own name, but which proposes to furnish an item which it did not itself manufacture, is 500 employees.

(b) Submission of offers. Submit signed and dated offers to the office specified in this solicitation at or before the exact time specified in this solicitation. Offers may be submitted on the SF 1449, letterhead stationery, or as otherwise specified in the solicitation. As a minimum, offers must show--

- (1) The solicitation number;
- (2) The time specified in the solicitation for receipt of offers;
- (3) The name, address, and telephone number of the offeror;
- (4) A technical description of the items being offered in sufficient detail to evaluate compliance with the requirements in the solicitation. This may include product literature, or other documents, if necessary;
- (5) Terms of any express warranty;
- (6) Price and any discount terms;
- (7) "Remit to" address, if different than mailing address;
- (8) A completed copy of the representations and certifications at FAR 52.212-3;
- (9) Acknowledgment of Solicitation Amendments;
- (10) Past performance information, when included as an evaluation factor, to include recent and relevant contracts for the same or similar items and other references (including contract numbers, points of contact with telephone numbers and other relevant information); and

(11) If the offer is not submitted on the SF 1449, include a statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation. Offers that fail to furnish required representations or information, or reject the terms and conditions of the solicitation may be excluded from consideration.

(c) Period for acceptance of offers. The offeror agrees to hold the prices in its offer firm for 30 calendar days from the date specified for receipt of offers, unless another time period is specified in an addendum to the solicitation.

(d) Product samples. When required by the solicitation, product samples shall be submitted at or prior to the time specified for receipt of offers. Unless otherwise specified in this solicitation, these samples shall be submitted at no expense to the Government, and returned at the sender's request and expense, unless they are destroyed during preaward testing.

(e) Multiple offers. Offerors are encouraged to submit multiple offers presenting alternative terms and conditions or commercial items for satisfying the requirements of this solicitation. Each offer submitted will be evaluated separately.

(f) Late submissions, modifications, revisions, and withdrawals of offers:

(1) Offerors are responsible for submitting offers, and any modifications, revisions, or withdrawals, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that offers or revisions are due.

(2)(i) Any offer, modification, revision, or withdrawal of an offer received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--

(A) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of offers; or

(B) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(C) If this solicitation is a request for proposals, it was the only proposal received.

(ii) However, a late modification of an otherwise successful offer, that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(3) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the offer wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(4) If an emergency or unanticipated event interrupts normal Government processes so that offers cannot be received at the Government office designated for receipt of offers by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation or other notice of an extension of the closing date, the time specified for receipt of offers will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(5) Offers may be withdrawn by written notice received at any time before the exact time set for receipt of offers. Oral offers in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile offers, offers may be withdrawn via facsimile received at any time before the exact time set for receipt of offers, subject to the conditions specified in the solicitation concerning facsimile offers. An offer may be withdrawn in person by an offeror or its authorized representative if, before the exact time set for receipt of offers, the identity of the person requesting withdrawal is established and the person signs a receipt for the offer.

(g) Contract award (not applicable to Invitation for Bids). The Government intends to evaluate offers and award a contract without discussions with offerors. Therefore, the offeror's initial offer should contain the offeror's best terms from a price and technical standpoint. However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary. The Government may reject any or all offers if such action is in the public interest; accept other than the lowest offer; and waive informalities and minor irregularities in offers received.

(h) Multiple awards. The Government may accept any item or group of items of an offer, unless the offeror qualifies the offer by specific limitations. Unless otherwise provided in the Schedule, offers may not be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit prices offered, unless the offeror specifies otherwise in the offer.

(i) Availability of requirements documents cited in the solicitation. (1) The Index of Federal Specifications, Standards and Commercial Item Descriptions and the documents listed in it may be obtained from the General Services Administration, Federal Supply Service Bureau, Specifications Section, Suite 8100, 470 L'Enfant Plaza, SW, Washington, DC 20407 ((202) 619-8925).

(2) The DOD Index of Specifications and Standards (DODISS) and documents listed in it may be obtained from the Standardization Documents Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094 (telephone (215) 697-2569).

(i) Availability of requirements documents cited in the solicitation. (1)(i) The GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, and copies of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained for a fee by submitting a request to--GSA Federal Supply Service Specifications Section, Suite 8100, 470 East L'Enfant Plaza, SW, Washington, DC 20407, Telephone (202) 619-8925, Facsimile (202) 619-8978.

(ii) If the General Services Administration, Department of Agriculture, or Department of Veterans Affairs issued this solicitation, a single copy of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained free of charge by submitting a request to the addressee in paragraph (i)(1)(i) of this provision. Additional copies will be issued for a fee.

(2) The DoD Index of Specifications and Standards (DoDISS) and documents listed in it may be obtained from the--Department of Defense Single Stock Point (DoDSSP), Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2667/2179, Facsimile (215) 697-1462.

(i) Automatic distribution may be obtained on a subscription basis.

(ii) Order forms, pricing information, and customer support information may be obtained--

(A) By telephone at (215) 697-2667/2179; or

(B) Through the DoDSSP Internet site at <http://assist.daps.mil>.

(3) Nongovernment (voluntary) standards must be obtained from the organization responsible for their preparation, publication, or maintenance.

(j) Data Universal Numbering System (DUNS) Number. (Applies to offers exceeding \$25,000.) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" followed by the DUNS number that identifies the offeror's name and address. If the offeror does not have a DUNS number, it should contact Dun and Bradstreet to obtain one at no charge. An offeror within the United States may call 1-800-333-0505. The offeror may obtain more information regarding the DUNS number, including locations of local Dun and Bradstreet Information Services offices for offerors located outside the United States, from the Internet home page at <http://www.customerservice@dnb.com/>. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at globalinfo@mail.dnb.com. (End of provision)

52.212-2 EVALUATION--COMMERCIAL ITEMS (JAN 1999)

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers:

(i) AWARD WILL BE MADE TO THE TECHNICALLY ACCEPTABLE, RESPONSIBLE QUOTER WHO QUOTES THE LOWEST REASONABLE PRICE.

(ii) TECHNICAL ACCEPTABILITY WILL BE EVALUATED ON A GO/NO-GO BASIS. THE CRITERIA FOR DETERMINATION OF TECHNICAL ACCEPTABILITY ARE LISTED BELOW:

- (1) PRIOR EXPERIENCE WITH SIMILAR PRODUCTS
- (2) EVIDENCE THAT THE SOUND ENCLOSURE WILL MEET THE REQUIREMENTS OF PARAGRAPH 8.2 OF THE SOW ENTITLED ENVIRONMENTAL OPERATING CONDITIONS.
- (3) DIMENSIONAL DATA THAT THE PROPOSED UNITS WILL FIT WITHIN THE DIMENSIONAL CONSTRAINTS SHOWN ON THE CONTRACT DRAWINGS (ATTACHMENT (2) AND (3))
- (4) CERTIFICATION THAT THE TOW HAULAGE UNIT CONTROL PANELS WILL COMPLY WITH THE REQUIREMENTS OF UNDERWRITER'S LABORATORIES INDUSTRIAL CONTROL PANELS LISTING AND FOLLOW-UP SERVICE.

TECHNICAL ACCEPTABILITY WILL BE DETERMINED BY THE QUOTER'S SUBMITTALS AS REQUIRED BY PARAGRAPHS 4.1, 4.2 AND 4.3 OF ATTACHMENT (1) – STATEMENT OF WORK. THE GOVERNMENT MAY CONTACT REFERENCES SUBMITTED IN ACCORDANCE WITH PARAGRAPH 4.1 OF THE STATEMENT OF WORK. INFORMATION PROVIDED BY EACH REFERENCE WILL BE CONSIDERED IN THE EVALUATION OF THE QUOTER'S TECHNICAL ACCEPTABILITY.

(iii) ONLY THE CLIN/SLIN COMBINATIONS PROVIDED BELOW WILL BE USED TO DETERMINE THE "LOWEST EVALUATED PRICE" IN ACCORDANCE WITH THE GOVERNMENT'S BEST ESTIMATE FOR FUTURE REQUIREMENTS. THE GOVERNMENT, HOWEVER, RESERVES THE RIGHT TO VARY FROM THE STATED CLIN/SLIN COMBINATIONS AFTER AWARD. THE EVALUATED PRICE WILL BE BASED ON THE BASIC AWARD AND THE GOVERNMENT EXERCISING TWO OPTIONS PER YEAR STARTING IN CALENDAR YEAR 2002 AND ENDING IN CALENDAR YEAR 2005. THIS CAN BE CALCULATED BY **ADDING** THE FOLLOWING CONTRACT LINE ITEM NUMBERS (CLIN) AND/OR SUBLINE ITEMS (SLIN) :

SLIN 0001AA
SLIN 0001AB
SLIN 0001AC
SLIN 0002AA – CALENDAR YEAR 2002 PRICING
SLIN 0002AB – CALENDAR YEAR 2002 PRICING
SLIN 0003AA – CALENDAR YEAR 2002 PRICING
SLIN 0003AB – CALENDAR YEAR 2002 PRICING
SLIN 0004AA – CALENDAR YEAR 2003 PRICING
SLIN 0004AB – CALENDAR YEAR 2003 PRICING
SLIN 0005AA – CALENDAR YEAR 2003 PRICING
SLIN 0005AB – CALENDAR YEAR 2003 PRICING
SLIN 0006AA – CALENDAR YEAR 2004 PRICING
SLIN 0006AB – CALENDAR YEAR 2004 PRICING
SLIN 0007AA – CALENDAR YEAR 2004 PRICING
SLIN 0007AB – CALENDAR YEAR 2004 PRICING
SLIN 0008AA – CALENDAR YEAR 2005 PRICING
SLIN 0008AB – CALENDAR YEAR 2005 PRICING
SLIN 0009AA – CALENDAR YEAR 2005 PRICING
SLIN 0009AB – CALENDAR YEAR 2005 PRICING

(b) Options. The Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. The Government may determine that an offer is unacceptable if the option prices are significantly unbalanced. Evaluation of options shall not obligate the Government to exercise the option(s).

(c) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's

specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

(End of clause)

52.212-3 OFFEROR REPRESENTATIONS AND CERTIFICATIONS--COMMERCIAL ITEMS (OCT 2000)
ALTERNATE I (OCT 2000)

(a) Definitions. As used in this provision:

"Emerging small business" means a small business concern whose size is no greater than 50 percent of the numerical size standard for the NAICS code designated.

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service--disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern--

(1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

"Women-owned business concern" means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Taxpayer Identification Number (TIN) (26 U.S.C. 6109, 31 U.S.C. 7701). (Not applicable if the offeror is required to provide this information to a central contractor registration database to be eligible for award.)

(1) All offerors must submit the information required in paragraphs (b)(3) through (b)(5) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the Internal Revenue Service (IRS).

(2) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(3) Taxpayer Identification Number (TIN).

TIN:-----

TIN has been applied for.

TIN is not required because:

Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

Offeror is an agency or instrumentality of a foreign government;

Offeror is an agency or instrumentality of the Federal Government.

(4) Type of organization.

Sole proprietorship;

Partnership;

Corporate entity (not tax-exempt);

Corporate entity (tax-exempt);

Government entity (Federal, State, or local);

Foreign government;

International organization per 26 CFR 1.6049-4;

Other-----

(5) Common parent.

Offeror is not owned or controlled by a common parent;

Name and TIN of common parent:

Name-----

TIN-----

(c) Offerors must complete the following representations when the resulting contract is to be performed inside the United States, its territories or possessions, Puerto Rico, the Trust Territory of the Pacific Islands, or the District of Columbia. Check all that apply.

(1) Small business concern. The offeror represents as part of its offer that it () is, () is not a small business concern.

(2) Veteran-owned small business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents as part of its offer that it () is, () is not a veteran-owned small business concern.

(3) Service-disabled veteran-owned small business concern. (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2) of this provision.) The offeror represents as part of its offer that it () is, () is not a service-disabled veteran-owned small business concern.

(4) Small disadvantaged business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents, for general statistical purposes, that it () is, () is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) Women-owned small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it () is, () is not a women-owned small business concern.

Note: Complete paragraphs (c)(6) and (c)(7) only if this solicitation is expected to exceed the simplified acquisition threshold.

(6) Women-owned business concern (other than small business concern). [Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it () is, a women-owned business concern.

(7) Tie bid priority for labor surplus area concerns. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price:

(8) Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program. [Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.]

(i) (Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the four designated industry groups (DIGs).) The offeror represents as part of its offer that it () is, () is not an emerging small business.

(ii) (Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or four designated industry groups (DIGs).) Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts).

(Check one of the following):

Average Annual

Number of Employees Gross Revenues

___ 50 or fewer ___ \$1 million or less

___ 51 - 100 ___ \$1,000,001 - \$2 million

101 - 250 \$2,000,001 - \$3.5 million

251 - 500 \$3,500,001 - \$5 million

501 - 750 \$5,000,001 - \$10 million

751 - 1,000 \$10,000,001 - \$17 million

Over 1,000 Over \$17 million

(9) (Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns or FAR 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.)

(i) General. The offeror represents that either--

(A) It () is, () is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net), and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); or

(B) It () has, () has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns. The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(7)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. [The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: _____.]

(10) (Complete if the offeror has represented itself as disadvantaged in paragraph (c)(2) or (c)(9) of this provision.) [The offeror shall check the category in which its ownership falls]:

Black American.

Hispanic American.

Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

Individual/concern, other than one of the preceding.

(11) HUBZone small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents as part of its offer that—

(i) It () is, () is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal place of ownership, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

(ii) It () is, () is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (c)(11)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. [The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: _____.] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(d) Certifications and representations required to implement provisions of Executive Order 11246--

(1) Previous Contracts and Compliance. The offeror represents that--

(i) It () has, () has not, participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the and

(ii) It () has, () has not, filed all required compliance reports.

(2) Affirmative Action Compliance. The offeror represents that--

(i) It () has developed and has on file, () has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR Subparts 60-1 and 60-2), or

(ii) It () has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) Certification Regarding Payments to Influence Federal Transactions (31 U.S.C. 1352). (Applies only if the contract is expected to exceed \$100,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract.

(f) Buy American Act--Balance of Payments Program Certificate. (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act--Balance of Payments Program--Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product as defined in the clause of this solicitation entitled "Buy American Act--Balance of Payments Program--Supplies" and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

(2) Foreign End Products:

Line Item No.:-----
Country of Origin:-----

(List as necessary)

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)(1) Buy American Act--North American Free Trade Agreement--Israeli Trade Act--Balance of Payments Program Certificate. (Applies only if the clause at FAR 52.225-3, Buy American Act--North American Free Trade Agreement--Israeli Trade Act--Balance of Payments Program, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product as defined in the clause of this solicitation entitled ``Buy American Act--North American Free Trade Agreement--Israeli Trade Act--Balance of Payments Program" and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States.

(ii) The offeror certifies that the following supplies are NAFTA country end products or Israeli end products as defined in the clause of this solicitation entitled ``Buy American Act--North American Free Trade Agreement--Israeli Trade Act--Balance of Payments Program":

NAFTA Country or Israeli End Products

Line Item No.:-----
Country of Origin:-----

(List as necessary)

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) of this provision) as defined in the clause of this solicitation entitled ``Buy American Act--North American Free Trade Agreement--Israeli Trade Act--Balance of Payments Program." The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

Other Foreign End Products

Line Item No.:-----
Country of Origin:-----

(List as necessary)

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) Buy American Act--North American Free Trade Agreements--Israeli Trade Act--Balance of Payments Program Certificate, Alternate I (Feb 2000). If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled ``Buy American Act--North American Free Trade Agreement--Israeli Trade Act--Balance of Payments Program":

Canadian End Products

Line Item No.:-----

(List as necessary)

(3) Buy American Act--North American Free Trade Agreements--Israeli Trade Act--Balance of Payments Program Certificate, Alternate II (Feb 2000). If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act--North American Free Trade Agreement--Israeli Trade Act--Balance of Payments Program":

Canadian or Israeli End Products

Line Item No.:-----

Country of Origin:-----

(List as necessary)

(4) Trade Agreements Certificate. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(4)(ii) of this provision, is a U.S.-made, designated country, Caribbean Basin country, or NAFTA country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(ii) The offeror shall list as other end products those end products that are not U.S.-made, designated country, Caribbean Basin country, or NAFTA country end products.

Other End Products

Line Item No.:-----

Country of Origin:-----

(List as necessary)

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items subject to the Trade Agreements Act, the Government will evaluate offers of U.S.-made, designated country, Caribbean Basin country, or NAFTA country end products without regard to the restrictions of the Buy American Act or the Balance of Payments Program. The Government will consider for award only offers of U.S.-made, designated country, Caribbean Basin country, or NAFTA country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12549). The offeror certifies, to the best of its knowledge and belief, that --

(1) The offeror and/or any of its principals () are, () are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency, and

(2) () Have, () have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and () are, () are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses.

(End of provision)

52.212-4 CONTRACT TERMS AND CONDITIONS-- COMMERCIAL ITEMS (MAY 1999)

(a) Inspection/Acceptance. The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or

reperformance of nonconforming services at no increase in contract price. The Government must exercise its post-acceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) Assignment. The Contractor or its assignee's rights to be paid amounts due as a result of performance of this contract, may be assigned to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727).

(c) Changes. Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) Disputes. This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) Definitions. The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) Excusable delays. The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement or any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) Invoice. The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized,) to the address designated in the contract to receive invoices. An invoice must include--

- (1) Name and address of the Contractor;
- (2) Invoice date;
- (3) Contract number, contract line item number and, if applicable, the order number;
- (4) Description, quantity, unit of measure, unit price and extended price of the items delivered;
- (5) Shipping number and date of shipment including the bill of lading number and weight of shipment if shipped on Government bill of lading;
- (6) Terms of any prompt payment discount offered;
- (7) Name and address of official to whom payment is to be sent; and
- (8) Name, title, and phone number of person to be notified in event of defective invoice.

Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) Circular A-125, Prompt Payment. Contractors are encouraged to assign an identification number to each invoice.

(h) Patent indemnity. The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) Payment. Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) Circular A-125, Prompt Payment. If the Government makes payment by Electronic Funds Transfer (EFT), see 52.212-5(b) for the appropriate EFT clause. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(j) Risk of loss. Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) Taxes. The contract price includes all applicable Federal, State, and local taxes and duties.

(l) Termination for the Government's convenience. The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) Termination for cause. The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) Title. Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) Warranty. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) Limitation of liability. Except as otherwise provided by an express or implied warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) Other compliances. The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) Compliance with laws unique to Government contracts. The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. 327, et seq., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.

(s) Order of precedence. Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order: (1) the schedule of supplies/services; (2) the Assignments, Disputes, Payments, Invoice, Other Compliances, and Compliance with Laws Unique to Government Contracts paragraphs of this clause; (3) the clause at 52.212-5; (4) addenda to this solicitation or contract, including any license agreements for computer software; (5) solicitation provisions if this is a solicitation; (6) other paragraphs of this clause; (7) the Standard Form 1449; (8) other documents, exhibits, and attachments; and (9) the specification.

(End of clause)

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (APR 1999) (DEVIATION)

(a) Comptroller General Examination of Record. The Contractor agrees to comply with the provisions of this paragraph (a) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-5, Audit and Records-Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times, the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of form. This does not require the Contractor to create or maintain any record that the contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(b) The Contractor is not required to include any FAR clause, other than those listed below (and as may be required by an addenda to this paragraph to establish the reasonableness of prices under Part 15), in a subcontract for commercial items or commercial components –

(1) 52.222-26, Equal Opportunity (E.O. 11246);

(2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212);

(3) 52.222-36, Affirmative Action for Workers with Disabilities (29 U.S.C. 793); and

(4) 52.247-64, Preference for Privately-Owned U.S.- Flag Commercial Vessels (46 U.S.C. 1241)(flow down not required for subcontracts awarded beginning May 1, 1996).

(End of clause)

52.215-6 PLACE OF PERFORMANCE (OCT 1997)

(a) The offeror or respondent, in the performance of any contract resulting from this solicitation, () intends, () does not intend [check applicable block] to use one or more plants or facilities located at a different address from the address of the offeror or respondent as indicated in this proposal or response to request for information.

(b) If the offeror or respondent checks “intends” in paragraph (a) of this provision, it shall insert in the following spaces the required information:

Place of performance (street Name and address of owner and
address, city, state, county, zip operator of the plant or facility
code) if other than offeror or respondent

52.217-5 EVALUATION OF OPTIONS (JUL 1990)

(a) Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(b) The Government may reject an offer as nonresponsive if it is materially unbalanced as to prices for the basic requirement and the option quantities. An offer is unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.

(End of provision)

52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor at anytime AFTER CONTRACT AWARD THROUGH 31 DECEMBER 2005. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUL 1996)

(a) Definition.

"Small business concern," as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(b) General. (1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected.

(2) Any award resulting from this solicitation will be made to a small business concern.

(c) Agreement. A small business concern submitting an offer in its own name agrees to furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States. The term "United States" includes its territories and possessions, the Commonwealth of Puerto Rico, the Trust Territory of the Pacific Islands, and the District of Columbia. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed \$25,000, a small business concern may furnish the product of any domestic firm. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2000)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

Definitions. As used in this contract--

HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

Small disadvantaged business concern means a small business concern that represents, as part of its offer that--

(1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;

(2) No material change in disadvantaged ownership and control has occurred since its certification;

(3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern--

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(End of clause)

52.219-14 LIMITATIONS ON SUBCONTRACTING (DEC 1996)

(a) This clause does not apply to the unrestricted portion of a partial set-aside.

(b) By submission of an offer and execution of a contract, the Offeror/Contractor agrees that in performance of the contract in the case of a contract for--

(1) Services (except construction). At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern.

(2) Supplies (other than procurement from a nonmanufacturer of such supplies). The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.

(3) General construction. The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.

(4) Construction by special trade contractors. The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (MAY 1999)

(a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either--

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Contractor EFT arrangements. If the Contractor has identified multiple payment receiving points (i.e., more than one remittance address and/or EFT information set) in the CCR database, and the Contractor has not notified the Government of the payment receiving point applicable to this contract, the Government shall make payment to the first payment receiving point (EFT information set or remittance address as applicable) listed in the CCR database.

(f) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for--

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(g) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(h) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register in the CCR database and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(i) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(j) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

(End of Clause)

52.233-2 SERVICE OF PROTEST (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from

US ARMY CORPS OF ENGINEERS
CONTRACTING OFFICER
ARMY CORPS OF ENGINEERS CENTRE
190 5TH STREET EAST
ST PAUL, MN 55101-1638
PHONE: 651-290-5409
FAX: 651-290-5706

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

52.247-34 F.O.B. DESTINATION (NOV 1991)

(a) The term "f.o.b. destination," as used in this clause, means--

(1) Free of expense to the Government, on board the carrier's conveyance, at a specified delivery point where the consignee's facility (plant, warehouse, store, lot, or other location to which shipment can be made) is located; and

(2) Supplies shall be delivered to the destination consignee's wharf (if destination is a port city and supplies are for export), warehouse unloading platform, or receiving dock, at the expense of the Contractor. The Government shall not be liable for any delivery, storage, demurrage, accessorial, or other charges involved before the actual delivery (or "constructive placement" as defined in carrier tariffs) of the supplies to the destination, unless such charges are caused by an act or order of the Government acting in its contractual capacity. If rail carrier is used, supplies shall be delivered to the specified unloading platform of the consignee. If motor carrier (including "piggyback") is used, supplies shall be delivered to truck tailgate at the unloading platform of the consignee, except when the supplies delivered meet the requirements of Item 568 of the National Motor Freight Classification for "heavy or bulky freight." When supplies meeting the requirements of the referenced Item 568 are delivered, unloading (including movement to the tailgate) shall be performed by the consignee, with assistance from the truck driver, if requested. If the contractor uses rail carrier or freight forwarded for less than carload shipments, the contractor shall ensure that the carrier will furnish tailgate delivery, when required, if transfer to truck is required to complete delivery to consignee.

(b) The Contractor shall--

(1)(i) Pack and mark the shipment to comply with contract specifications; or

(ii) In the absence of specifications, prepare the shipment in conformance with carrier requirements;

- (2) Prepare and distribute commercial bills of lading;
- (3) Deliver the shipment in good order and condition to the point of delivery specified in the contract;
- (4) Be responsible for any loss of and/or damage to the goods occurring before receipt of the shipment by the consignee at the delivery point specified in the contract;
- (5) Furnish a delivery schedule and designate the mode of delivering carrier; and
- (6) Pay and bear all charges to the specified point of delivery.

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far>

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far>

52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984)

- (a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.
- (b) The use in this solicitation of any [FAR](#) (48 CFR Chapter [1](#)) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

- (a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.
- (b) The use in this solicitation or contract of any [FAR](#) (48 CFR [1](#)) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION.(MAR 2000)

- (a) Definitions.

As used in this clause--

(1) Central Contractor Registration (CCR) database means the primary DoD repository for contractor information required for the conduct of business with DoD.

(2) Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.

(3) Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.

(4) Registered in the CCR database means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.

(b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.

(2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(3) Lack of registration in the CCR database will make an offeror ineligible for award.

(4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation.

(c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.

(d) Offerors and contractors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at <http://www.ccr2000.com>.

(End of clause)

252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of \$25,000 with a firm, or subsidiary of a firm, that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country.

(b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed

subcontractor notwithstanding its inclusion on the List of Parties Excluded From Federal Procurement and Nonprocurement Programs.

252.212-7000 OFFEROR REPRESENTATIONS AND CERTIFICATIONS- COMMERCIAL ITEMS. (NOV 1995)

(a) Definitions.

As used in this clause-

(1) Foreign person means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec. 2415).

(2) United States person is defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concern, as determined under regulations of the President.

(b) Certification.

By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it -

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec. 2407(a) prohibits a United States person from taking.

(c) Representation of Extent of Transportation by Sea. (This representation does not apply to solicitations for the direct purchase of ocean transportation services).

(1) The Offeror shall indicate by checking the appropriate blank in paragraph (c)(2) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term "supplies" is defined in the Transportation of Supplies by Sea clause of this solicitation.

(2) Representation.

The Offeror represents that it-

Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

(3) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea Clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense Federal Acquisition Regulation Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

252.212-7001 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS APPLICABLE TO DEFENSE ACQUISITIONS OF COMMERCIAL ITEMS (APR 1999) (DEVIATION)

(a) In addition to the clauses listed in paragraph (b) of the Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items (DEVIATION) clause of this contract, the Contractor shall include the terms of the following clause, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

252.225-7014 Preference for Domestic Specialty Metals, Alternate I (10 U.S.C. 2241 note).

(End of clause)

252.225-7000 BUY AMERICAN ACT--BALANCE OF PAYMENTS PROGRAM CERTIFICATE (SEP 1999)

(a) Definitions. Domestic end product, qualifying country, qualifying country end product, and qualifying country end product have the meanings given in the Buy American Act and Balance of Payments Program clause of this solicitation.

(b) Evaluation. Offers will be evaluated by giving preference to domestic end products and qualifying country end products over nonqualifying country end products.

(c) Certifications. (1) The Offeror certifies that--

(i) Each end product, except those listed in paragraphs (c) (2) or (3) of this provision, is a domestic end product; and

(ii) Components of unknown origin are considered to have been mined, produced, or manufactured outside the United States or a qualifying country.

(2) The Offeror certifies that the following end products are qualifying country end products:

Qualifying Country End Products

Line Item Number

Country of Origin

(List only qualifying country end products.)

(3) The Offeror certifies that the following end products are nonqualifying country end products:

Nonqualifying Country End Products

Line Item Number

Country of Origin (If known)

(End of provision)

252.225-7001 BUY AMERICAN ACT AND BALANCE OF PAYMENTS PROGRAM (MAR 1998)

(a) Definitions.

As used in this clause--

(1) Components means those articles, materials, and supplies directly incorporated into end products.

(2) Domestic end product means--

(i) An unmanufactured end product that has been mined or produced in the United States; or

(ii) An end product manufactured in the United States if the cost of its qualifying country components and its components that are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. The cost of components shall include transportation costs to the place of incorporation into the end product and U.S. duty (whether or not a duty-free entry certificate may be issued). A component shall be considered to have been mined, produced, or manufactured in the United States (regardless of its source in fact) if the end product in which it is incorporated is manufactured in the United States and the component is of a class or kind--

(A) Determined to be not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality; or

(B) That the Secretary concerned determines would be inconsistent with the public interest to apply the restrictions of the Buy American Act.

(3) End product means those articles, materials, and supplies to be acquired for public use under the contract. For this contract, the end products are the line items to be delivered to the Government (including supplies to be acquired by the Government for public use in connection with service contracts, but excluding installation and other services to be performed after delivery).

(4) Nonqualifying country end product means an end product that is neither a domestic end product nor a qualifying country end product.

(5) Qualifying country means any country set forth in subsection 225.872-1 of the Defense Federal Acquisition Regulation Supplement.

(6) Qualifying country component means an item mined, produced, or manufactured in a qualifying country.

(7) Qualifying country end product means--

(i) An unmanufactured end product mined or produced in a qualifying country; or

(ii) An end product manufactured in a qualifying country if the cost of the components mined, produced, or manufactured in the qualifying country and its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components.

(b) This clause implements the Buy American Act (41 U.S.C. Section 10a-d) in a manner that will encourage a favorable international balance of payments by providing a preference to domestic end products over other end products, except for end products which are qualifying country end products.

(c) The Contractor agrees that it will deliver only domestic end products unless, in its offer, it specified delivery of other end products in the Buy American Act--Balance of Payments Program Certificate provision of the solicitation. An offer certifying that a qualifying country end product will be supplied requires the Contractor to deliver a qualifying country end product or a domestic end product.

(d) The offered price of qualifying country end products should not include custom fees or duty. The offered price of nonqualifying country end products, and products manufactured in the United States that contain nonqualifying country components, must include all applicable duty. The award price will not include duty for end products or components that are to be accorded duty-free entry. Generally, when the Buy American Act is applicable, each nonqualifying country offer is adjusted for the purpose of evaluation by adding 50 percent of the offer, inclusive of duty.

(a) *Definitions.* As used in this clause:

(1) "Commercial item" does not include commercial computer software.

(2) "Form, fit, and function data" means technical data that describes the required overall physical, functional, and performance characteristics (along with the qualification requirements, if applicable) of an item, component, or process to the extent necessary to permit identification of physically and functionally interchangeable items.

(3) The term "item" includes components or processes.

(4) "Technical data" means recorded information, regardless of the form or method of recording, of a scientific or technical nature (including computer software documentation). The term does not include computer software or data incidental to contract administration, such as financial and/or management information.

(b) *License.*

(1) The Government shall have the unrestricted right to use, modify, reproduce, release, perform, display, or disclose technical data, and to permit others to do so, that --

(i) Have been provided to the Government or others without restrictions on use, modification, reproduction, release, or further disclosure other than a release or disclosure resulting from the sale, transfer, or other assignment of interest in the technical data to another party or the sale or transfer of some or all of a business entity or its assets to another party;

(ii) Are form, fit, and function data;

(iii) Are a correction or change to technical data furnished to the Contractor by the Government;

(iv) Are necessary for operation, maintenance, installation, or training (other than detailed manufacturing or process data); or

(v) Have been provided to the Government under a prior contract or licensing agreement through which the Government has acquired the rights to use, modify, reproduce, release, perform, display, or disclose the data without restrictions.

(2) Except as provided in paragraph (b)(1) of this clause, the Government may use, modify, reproduce, release, perform, display, or disclose technical data within the Government only. The Government shall not --

(i) Use the technical data to manufacture additional quantities of the commercial items; or

(ii) Release, perform, display, disclose, or authorize use of the technical data outside the Government without the Contractor's written permission unless a release, disclosure or permitted use is necessary for emergency repair or overhaul of the commercial items furnished under this contract.

(c) *Additional license rights.* The Contractor, its subcontractors, and suppliers are not required to provide the Government additional rights to use, modify, reproduce, release, perform, display, or disclose technical data. However, if the Government desires to obtain additional rights in technical data, the Contractor agrees to promptly enter into negotiations with the Contracting Officer to determine whether there are acceptable terms for transferring such rights. All technical data in which the Contractor has granted the Government additional rights shall be listed or described in a special license agreement made part of this contract. The license shall enumerate the additional rights granted the Government in such data.

(d) *Release from liability.* The Contractor agrees that the Government, and other persons to whom the Government may have released or disclosed technical data delivered or otherwise furnished under this contract, shall have no liability for any release or disclosure of technical data that are not marked to indicate that such data are licensed data subject to use, modification, reproduction, release, performance, display, or disclosure restrictions.

(End of Clause)

252.227-7037 -- VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA (SEP 1999)

(a) *Definitions.* The terms used in this clause are defined in the Rights in Technical Data -- Noncommercial Items clause of this contract. (SEE THE FOLLOWING CLAUSE 52.227-7013 FOR DEFINITIONS)

(b) *Contracts for commercial items -- presumption of development at private expense.* Under a contract for a commercial item, component, or process, the Department of Defense shall presume that a Contractor's asserted use or release restrictions are justified on the basis that the item, component, or process was developed exclusively at private expense. The Department shall not challenge such assertions unless information the Department provides that the item, component, or process was not developed exclusively at private expense.

(c) *Justification.* The Contractor or subcontractor at any tier is responsible for maintaining records sufficient to justify the validity of its markings that impose restrictions on the Government and others to use, duplicate, or disclose technical data delivered or required to be delivered under the contract or subcontract. Except under contracts for commercial items, the Contractor or subcontractor shall be prepared to furnish to the Contracting Officer a written justification for such restrictive markings in response to a challenge under paragraph (e) of this clause.

(d) *Prechallenge request for information.*

(1) The Contracting Officer may request the Contractor or subcontractor to furnish a written explanation for any restriction asserted by the Contractor or subcontractor on the right of the United States or others to use technical data. If, upon review of the explanation submitted, the Contracting Officer remains unable to ascertain the basis of the restrictive marking, the Contracting Officer may further request the Contractor or subcontractor to furnish additional information in the records of, or otherwise in the possession of or reasonably available to, the Contractor or subcontractor to justify the validity of any restrictive marking on technical data delivered or to be delivered under the contract or subcontract (e.g., a statement of facts accompanied with supporting documentation). The Contractor or subcontractor shall submit such written data as requested by the Contracting Officer within the time required or such longer period as may be mutually agreed.

(2) If the Contracting Officer, after reviewing the written data furnished pursuant to paragraph (d)(1) of this clause, or any other available information pertaining to the validity of a restrictive marking, determines that reasonable grounds exist to question the current validity of the marking and that continued adherence to the marking would make impracticable the subsequent competitive acquisition of the item, component, or process to which the technical data relates, the Contracting Officer shall follow the procedures in paragraph (e) of this clause.

(3) If the Contractor or subcontractor fails to respond to the Contracting Officer's request for information under paragraph (d)(1) of this clause, and the Contracting Officer determines that continued adherence to the marking would make impracticable the subsequent competitive acquisition of the item, component, or process to which the technical data relates, the Contracting Officer may challenge the validity of the marking as described in paragraph (e) of this clause.

(e) *Challenge.*

(1) Notwithstanding any provision of this contract concerning inspection and acceptance, if the Contracting Officer determines that a challenge to the restrictive marking is warranted, the Contracting Officer shall send a written challenge notice to the Contractor or subcontractor asserting the restrictive markings. Such challenge shall --

(i) State the specific grounds for challenging the asserted restriction;

(ii) Require a response within sixty (60) days justifying and providing sufficient evidence as to the current validity of the asserted restriction;

(iii) State that a DoD Contracting Officer's final decision, issued pursuant to paragraph (g) of this clause, sustaining the validity of a restrictive marking identical to the asserted restriction, within the three-year period preceding the challenge, shall serve as justification for the asserted restriction if the validated restriction was asserted by the same

Contractor or subcontractor (or any licensee of such Contractor or subcontractor) to which such notice is being provided; and

(iv) State that failure to respond to the challenge notice may result in issuance of a final decision pursuant to paragraph (f) of this clause.

(2) The Contracting Officer shall extend the time for response as appropriate if the Contractor or subcontractor submits a written request showing the need for additional time to prepare a response.

(3) The Contractor's or subcontractor's written response shall be considered a claim within the meaning of the Contract Disputes Act of 1978 (41 U.S.C.601, et seq.), and shall be certified in the form prescribed at 33.207 of the Federal Acquisition Regulation, regardless of dollar amount.

(4) A Contractor or subcontractor receiving challenges to the same restrictive markings from more than one Contracting Officer shall notify each Contracting Officer of the existence of more than one challenge. The notice shall also state which Contracting Officer initiated the first in time unanswered challenge. The Contracting Officer initiating the first in time unanswered challenge after consultation with the Contractor or subcontractor and the other Contracting Officers, shall formulate and distribute a schedule for responding to each of the challenge notices to all interested parties. The schedule shall afford the Contractor or subcontractor an opportunity to respond to each challenge notice. All parties will be bound by this schedule.

(f) *Final decision when Contractor or subcontractor fails to respond.* Upon a failure of a Contractor or subcontractor to submit any response to the challenge notice, other than a failure to respond under a contract for commercial items, the Contracting Officer will issue a final decision to the Contractor or subcontractor in accordance with the Disputes clause of this contract pertaining to the validity of the asserted restriction. This final decision shall be issued as soon as possible after the expiration of the time period of paragraph (e)(1)(ii) or (e)(2) of this clause. Following issuance of the final decision, the Contracting Officer will comply with the procedures in paragraphs (g)(2)(ii) through (iv) of this clause.

(g) *Final decision when Contractor or subcontractor responds.*

(1) If the Contracting Officer determines that the Contractor or subcontractor has justified the validity of the restrictive marking, the Contracting Officer shall issue a final decision to the Contractor or subcontractor sustaining the validity of the restrictive marking, and stating that the Government will continue to be bound by the restrictive marking. This final decision shall be issued within sixty (60) days after receipt of the Contractor's or subcontractor's response to the challenge notice, or within such longer period that the Contracting Officer has notified the Contractor or subcontractor that the Government will require. The notification of a longer period for issuance of a final decision will be made within sixty (60) days after receipt of the response to the challenge notice.

(2)

(i) If the Contracting Officer determines that the validity of the restrictive marking is not justified, the Contracting Officer shall issue a final decision to the Contractor or subcontractor in accordance with the Disputes clause of this contract. Notwithstanding paragraph (e) of the Disputes clause, the final decision shall be issued within sixty (60) days after receipt of the Contractor's or subcontractor's response to the challenge notice, or within such longer period that the Contracting Officer has notified the Contractor or subcontractor of the longer period that the Government will require. The notification of a longer period for issuance of a final decision will be made within sixty (60) days after receipt of the response to the challenge notice.

(ii) The Government agrees that it will continue to be bound by the restrictive marking for a period of ninety (90) days from the issuance of the Contracting Officer's final decision under paragraph (g)(2)(i) of this clause. The Contractor or subcontractor agrees that, if it intends to file suit in the United States Claims Court it will provide a notice of intent to file suit to the Contracting Officer within ninety (90) days from the issuance of the Contracting Officer's final decision under paragraph (g)(2)(i) of this clause. If the Contractor or subcontractor fails to appeal, file suit, or provide a notice of intent to file suit to the Contracting Officer within the ninety (90)-day period, the Government may cancel or ignore the restrictive markings, and the failure of the Contractor or subcontractor to take the required action constitutes agreement with such Government action.

(iii) The Government agrees that it will continue to be bound by the restrictive marking where a notice of intent to file suit in the United States Claims Court is provided to the Contracting Officer within ninety (90) days from the issuance of the final decision under paragraph (g)(2)(i) of this clause. The Government will no longer be bound, and the Contractor or subcontractor agrees that the Government may strike or ignore the restrictive markings, if the Contractor or subcontractor fails to file its suit within one (1) year after issuance of the final decision.

Notwithstanding the foregoing, where the head of an agency determines, on a nondelegable basis, that urgent or compelling circumstances will not permit waiting for the filing of a suit in the United States Claims Court, the Contractor or subcontractor agrees that the agency may, following notice to the Contractor or subcontractor, authorize release or disclosure of the technical data. Such agency determination may be made at any time after issuance of the final decision and will not affect the Contractor's or subcontractor's right to damages against the United States where its restrictive markings are ultimately upheld or to pursue other relief, if any, as may be provided by law.

(iv) The Government agrees that it will be bound by the restrictive marking where an appeal or suit is filed pursuant to the Contract Disputes Act until final disposition by an agency Board of Contract Appeals or the United States Claims Court. Notwithstanding the foregoing, where the head of an agency determines, on a nondelegable basis, following notice to the Contractor that urgent or compelling circumstances will not permit awaiting the decision by such Board of Contract Appeals or the United States Claims Court, the Contractor or subcontractor agrees that the agency may authorize release or disclosure of the technical data. Such agency determination may be made at any time after issuance of the final decision and will not affect the Contractor's or subcontractor's right to damages against the United States where its restrictive markings are ultimately upheld or to pursue other relief, if any, as may be provided by law.

(h) *Final disposition of appeal or suit.*

(1) If the Contractor or subcontractor appeals or files suit and if, upon final disposition of the appeal or suit, the Contracting Officer's decision is sustained --

(i) The restrictive marking on the technical data shall be cancelled, corrected or ignored; and

(ii) If the restrictive marking is found not to be substantially justified, the Contractor or subcontractor, as appropriate, shall be liable to the Government for payment of the cost to the Government of reviewing the restrictive marking and the fees and other expenses (as defined in 28 U.S.C.2412(d)(2)(A)) incurred by the Government in challenging the marking, unless special circumstances would make such payment unjust.

(2) If the Contractor or subcontractor appeals or files suit and if, upon final disposition of the appeal or suit, the Contracting Officer's decision is not sustained --

(i) The Government shall continue to be bound by the restrictive marking; and

(ii) The Government shall be liable to the Contractor or subcontractor for payment of fees and other expenses (as defined in 28 U.S.C.2412(d)(2)(A)) incurred by the Contractor or subcontractor in defending the marking, if the challenge by the Government is found not to have been made in good faith.

(i) *Duration of right to challenge.* The Government may review the validity of any restriction on technical data, delivered or to be delivered under a contract, asserted by the Contractor or subcontractor. During the period within three (3) years of final payment on a contract or within three (3) years of delivery of the technical data to the Government, whichever is later, the Contracting Officer may review and make a written determination to challenge the restriction. The Government may, however, challenge a restriction on the release, disclosure or use of technical data at any time if such technical data --

(1) Is publicly available;

(2) Has been furnished to the United States without restriction; or

(3) Has been otherwise made available without restriction. Only the Contracting Officer's final decision resolving a formal challenge by sustaining the validity of a restrictive marking constitutes "validation" as addressed in 10 U.S.C.2321.

(j) *Decision not to challenge.* A decision by the Government, or a determination by the Contracting Officer, to not challenge the restrictive marking or asserted restriction shall not constitute "validation."

(k) *Privity of contract.* The Contractor or subcontractor agrees that the Contracting Officer may transact matters under this clause directly with subcontractors at any tier that assert restrictive markings. However, this clause neither creates nor implies privity of contract between the Government and subcontractors.

(l) *Flowdown.* The Contractor or subcontractor agrees to insert this clause in contractual instruments with its subcontractors or suppliers at any tier requiring the delivery of technical data, except contractual instruments for commercial items or commercial components.

(End of Clause)

252.227-7013 -- RIGHTS IN TECHNICAL DATA -- NONCOMMERCIAL ITEMS (NOV 1995)—THIS CLAUSE IS NOT APPLICABLE TO THIS SOLICITATION OTHER THAN THE DEFINITIONS OUTLINED BELOW FOR THE USE WITH CLAUSE 252.227-7037 ABOVE

(a) *Definitions.* As used in this clause:

(1) "Computer data base" means a collection of data recorded in a form capable of being processed by a computer. The term does not include computer software.

(2) "Computer program" means a set of instructions, rules, or routines recorded in a form that is capable of causing a computer to perform a specific operation or series of operations.

(3) "Computer software" means computer programs, source code, source code listings, object code listings, design details, algorithms, processes, flow charts, formulae and related material that would enable the software to be reproduced, recreated, or recompiled. Computer software does not include computer data bases or computer software documentation.

(4) "Computer software documentation" means owner's manuals, user's manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium, that explain the capabilities of the computer software or provide instructions for using the software.

(5) "Detailed manufacturing or process data" means technical data that describe the steps, sequences, and conditions of manufacturing, processing or assembly used by the manufacturer to produce an item or component or to perform a process.

(6) "Developed" means that an item, component, or process exists and is workable. Thus, the item or component must have been constructed or the process practiced. Workability is generally established when the item, component, or process has been analyzed or tested sufficiently to demonstrate to reasonable people skilled in the applicable art that there is a high probability that it will operate as intended. Whether, how much, and what type of analysis or testing is required to establish workability depends on the nature of the item, component, or process, and the state of the art. To be considered "developed," the item, component, or process need not be at the stage where it could be offered for sale or sold on the commercial market, nor must the item, component, or process be actually reduced to practice within the meaning of Title 35 of the United States Code.

(7) "Developed exclusively at private expense" means development was accomplished entirely with costs charged to indirect cost pools, costs not allocated to a government contract, or any combination thereof.

(i) Private expense determinations should be made at the lowest practicable level.

(ii) Under fixed-price contracts, when total costs are greater than the firm-fixed-price or ceiling price of the contract, the additional development costs necessary to complete development shall not be considered when determining whether development was at government, private, or mixed expense.

(8) "Developed exclusively with government funds" means development was not accomplished exclusively or partially at private expense.

(9) "Developed with mixed funding" means development was accomplished partially with costs charged to indirect cost pools and/or costs not allocated to a government contract, and partially with costs charged directly to a government contract.

(10) "Form, fit, and function data" means technical data that describes the required overall physical, functional, and performance characteristics (along with the qualification requirements, if applicable) of an item, component, or process to the extent necessary to permit identification of physically and functionally interchangeable items.

(11) "Government purpose" means any activity in which the United States Government is a party, including cooperative agreements with international or multi-national defense organizations, or sales or transfers by the United States Government to foreign governments or international organizations. Government purposes include competitive procurement, but do not include the rights to use, modify, reproduce, release, perform, display, or disclose technical data for commercial purposes or authorize others to do so.

(12) "Government purpose rights" means the rights to --

(i) Use, modify, reproduce, release, perform, display, or disclose technical data within the Government without restriction; and

(ii) Release or disclose technical data outside the Government and authorize persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose that data for United States government purposes.

(13) "Limited rights" means the rights to use, modify, reproduce, release, perform, display, or disclose technical data, in whole or in part, within the Government. The Government may not, without the written permission of the party asserting limited rights, release or disclose the technical data outside the Government, use the technical data for manufacture, or authorize the technical data to be used by another party, except that the Government may reproduce, release or disclose such data or authorize the use or reproduction of the data by persons outside the Government if reproduction, release, disclosure, or use is --

(i) Necessary for emergency repair and overhaul; or

(ii) A release or disclosure of technical data (other than detailed manufacturing or process data) to, or use of such data by, a foreign government that is in the interest of the Government and is required for evaluational or informational purposes;

(iii) Subject to a prohibition on the further reproduction, release, disclosure, or use of the technical data; and

(iv) The contractor or subcontractor asserting the restriction is notified of such reproduction, release, disclosure, or use.

(14) "Technical data" means recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer software documentation). The term does not include computer software or data incidental to contract administration, such as financial and/or management information.

(15) "Unlimited rights" means rights to use, modify, reproduce, perform, display, release, or disclose technical data in whole or in part, in any manner, and for any purpose whatsoever, and to have or authorize others to do so.

(End of clause for purpose in this solicitation)

252.242-7000 POSTAWARD CONFERENCE (DEC 1991)

The Contractor agrees to attend any postaward conference convened by the contracting activity or contract administration office in accordance with Federal Acquisition Regulation subpart 42.5.

(End of clause)

252.246-7000 MATERIAL INSPECTION AND RECEIVING REPORT (DEC 1991)

At the time of each delivery of supplies or services under this contract, the Contractor shall prepare and furnish to the Government a Material Inspection and Receiving Report in the manner and to the extent required by Appendix F, Material Inspection and Receiving Report, of the Defense FAR Supplement.

(End of clause)

252.247-7024 NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)

(a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If, however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor --

(1) Shall notify the Contracting Officer of that fact; and

(2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.

(b) The Contractor shall include this clause; including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties--

(1) In all subcontracts under this contract, if this contract is a construction contract; or

(2) If this contract is not a construction contract, in all subcontracts under this contract that are for--

(i) Noncommercial items; or

(ii) Commercial items that--

(A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(End of clause)

52.232-5001 CONTINUING CONTRACTS (MAR 1995)

(a) This is a continuing contract, as authorized by Section 10 of the River and Harbor Act of September 22, 1922 (33 U.S. Code 621). The payment of some portion of the contract price is dependent upon reservations of funds from future appropriations, and from future contribution to the project having one or more non-federal project sponsors. The responsibilities of the Government are limited by this clause notwithstanding any contrary provision of the "Payments to Contractor" clause or any other clause of this contract.

(b) The sum of \$200,000 has been reserved for this contract and is available for payments to the contractor during the current fiscal year. It is expected that Congress will make appropriations for future fiscal years from which additional funds together with funds provided by one or more non-federal project sponsors will be reserved for this contract.

(c) Failure to make payments in excess of the amount currently reserved, or that may be reserved from time to time, shall not entitle the contractor to a price adjustment under the terms of this contract except as specifically provided in paragraphs (f) and (I) below. No such failure shall constitute a breach of this contract, except that this provision shall not bar a breach-of-contract action if an amount finally determined to be due as a termination allowance remains unpaid for one year due solely to a failure to reserve sufficient additional funds therefore.

(d) The Government may at any time reserve additional funds for payments under the contract if there are funds available for such purpose. The contracting officer will promptly notify the contractor of any additional funds reserved for the contract by issuing an administrative modification to the contract.

(e) If earnings will be such that funds reserved for the contract will be exhausted before the end of any fiscal year, the contractor shall give written notice to the contracting officer of the estimated date of exhaustion and the amount of additional funds which will be needed to meet payments due or to become due under the contract during that fiscal year. This notice shall be given not less than 45 nor more than 60 days prior to the estimated date of exhaustion.

(f) No payments will be made after exhaustion of funds except to the extent that additional funds are reserved for the contract. The contractor shall be entitled to simple interest on any payment that the contracting officer determines was actually earned under the terms of the contract and would have been made except for exhaustion of funds. Interest shall be computed from the time such payment would otherwise have been made until actually or constructively made, and shall be at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41, 85 STAT 97, as in effect on the first day of the delay in such payment.

(g) Any suspension, delay, or interruption of work arising from exhaustion or anticipated exhaustion of funds shall not constitute a breach of this contract and shall not entitle the contractor to any price adjustment under the "Suspension of Work" clause or in any other manner under this contract.

(h) An equitable adjustment in performance time shall be made for any increase in the time required for performance of any part of the work arising from exhaustion of funds or the reasonable anticipation of exhaustion of funds.

(i) If, upon the expiration of sixty (60) days after the beginning of the fiscal year following an exhaustion of funds, the Government has failed to reserve sufficient additional funds to cover payments otherwise due, the contractor, by written notice delivered to the contracting officer at any time before such additional funds are reserved, may elect to treat his right to proceed with the work as having been terminated. Such a termination shall be considered a termination for the convenience of the Government.

(j) If at any time it becomes apparent that the funds reserved for any fiscal year are in excess of the funds required to meet all payments due or to become due the contractor because of work performed and to be performed under the contract during the fiscal year, the Government reserves the right, after notice to the contractor, to reduce said reservation by the amount of such excess.

(End of Clause)

ADDENDA TO 51.212-4

52.246-17 -- Warranty of Supplies of a Noncomplex Nature (Apr 1984)

Warranty of Supplies of a Noncomplex Nature (Apr 1984)

(a) *Definitions.*

"*Acceptance*," as used in this clause, means the act of an authorized representative of the Government by which the Government assumes for itself, or as an agent of another, ownership of existing supplies, or approves specific services as partial or complete performance of the contract.

"*Correction*," as used in this clause, means the elimination of a defect.

"*Supplies*," as used in this clause, means the end item furnished by the Contractor and related services required under the contract. The word does not include "data."

(b) *Contractor's obligations.*

(1) Notwithstanding inspection and acceptance by the Government of supplies furnished under this contract, or any condition of this contract concerning the conclusiveness thereof, the Contractor warrants that for a period of two years (2 years) after acceptance --

(i) All supplies furnished under this contract will be free from defects in design, material or workmanship and will conform with all requirements of this contract; and

(ii) The preservation, packaging, packing, and marking, and the preparation for, and method of, shipment of such supplies will conform with the requirements of this contract.

(2) When return, correction, or replacement is required, transportation charges and responsibility for the supplies while in transit shall be borne by the Contractor. However, the Contractor's liability for the transportation charges shall not exceed an amount equal to the cost of transportation by the usual commercial method of shipment between the place of delivery specified in this contract and the Contractor's plant, and return.

(3) Any supplies or parts thereof, corrected or furnished in replacement under this clause, shall also be subject to the terms of this clause to the same extent as supplies initially delivered. The warranty, with respect to supplies or parts thereof, shall be equal in duration to that in paragraph (b)(1) of this clause and shall run from the date of delivery of the corrected or replaced supplies.

(c) *Remedies available to the Government.*

(1) The Contracting Officer shall give written notice to the Contractor of any breach of warranties in paragraph (b)(1) of this clause within 45 days after discovery of the defect.

(2) Within a reasonable time after the notice, the Contracting Officer may either --

(i) Require, by written notice, the prompt correction or replacement of any supplies or parts thereof (including preservation, packaging, packing, and marking) that do not conform with the requirements of this contract within the meaning of paragraph (b)(1) of this clause; or

(ii) Retain such supplies and reduce the contract price by an amount equitable under the circumstances.

(3) Within a reasonable time after notice of any breach of the warranties specified in paragraph (b)(1) of this clause, the Contracting Officer may exercise one or more of the following options:

(A) Require an equitable adjustment in the contract price for any supply or group of supplies.

(B) Screen the supplies grouped for warranty action under this clause at the Contractor's expense and return all nonconforming supplies to the Contractor for correction or replacement.

(C) Require the Contractor to screen the supplies at locations designated by the Government within the continental United States and to correct or replace all nonconforming supplies.

(D) Return the supplies grouped for warranty action under this clause to the Contractor (irrespective of the f.o.b. point or the point of acceptance) for screening and correction or replacement.

(4) If the Contractor does not agree as to responsibility to correct or replace the supplies delivered, the Contractor shall nevertheless proceed in accordance with the written request issued by the Contracting Officer under paragraph (c)(2) of this clause to correct or replace the defective or nonconforming supplies. In the event it is later determined that the supplies were not defective or nonconforming within the terms and conditions of this clause, the contract price will be equitably adjusted.

(5) The rights and remedies of the Government provided in this clause are in addition to and do not limit any rights afforded to the Government by any other clause of this contract.

(6) The Contractor shall be liable for the reasonable costs of disassembly and/or reassembly of larger items when it is necessary to remove the supplies to be inspected and/or returned for correction or replacement.

(End of Clause)

LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

DOCUMENT TYPE	DESCRIPTION	PAGES	DATE
Attachment (1)	Statement of Work	17	November 22, 2000
Attachment (2)	Drawing No. M-LG-33/028	1	November 2000
Attachment (3)	Drawing No. M-L8-78/430	1	August 1, 2000

STATEMENT OF WORK
HYDRAULIC TOW HAULAGE UNITS
FOR
US ARMY CORPS OF ENGINEERS
ST PAUL DISTRICT

11/22/00

Prepared by
US ARMY CORPS OF ENGINEERS
ST PAUL DISTRICT

1. SCOPE. This section defines the required features of the tow haulage winches and accessories for use at the upstream end of navigation locks in St. Paul District. This work statement is for the purchase of two complete tow haulage units for Lock Sites #3 and #9 shown on the site drawings including spare parts and an optional purchase of up to eight (8) additional tow haulage units with associated spare parts in subsequent years, which may be exercised. All tow haulage units will be identical.

1.1. Haulage Equipment. The Contractor shall submit shop drawings for approval of fabrication and component selection, as well as inspection, supply, and delivery of the following hydraulic winch and hydraulic power unit equipment:

- a) Tow haulage unit shall produce a line pull of 12,000 lbs. on the second layer of the hoist drum at the loaded line speed 120 feet per minute. Tow haulage unit shall produce a light line (no load) pull at not less than 250 FPM.
- b) Tow haulage unit to have drag function for when the rope is pulled from the drum and through the levelwind system by variable speed (between 0 feet per minute and 250 feet per minute) manually operated electric “golfcarts.” Drag function to provide constant resistive torque at drum and resistive torque shall be user adjustable to range at least from 0 foot pounds to 100 foot pounds.
- c) Hydraulic power unit driven by a three phase, 60 Hz, 460 volt A.C. motor. Unit shall be configured to fit within existing structures with low profile height for maximum operating visibility. Unit shall be mounted on two separate baseplates to allow possibility that hydraulic power unit and control panel can be mounted a safe distance away from the hydraulic winch. Dimension maximums are shown on the contract drawing.
- d) Spare parts as described in Paragraph 11.
- e) Factory test as specified in Paragraph 10.

2. NOT USED

3. APPLICABLE PUBLICATIONS. The following publications of the issues listed below, but referred to thereafter by basic designation only, form a part of this specification to the extent indicated by the references thereto:

3.1. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

- ANSI B30.7 (1994) Base Mounted Drum Hoists
- ANSI C80.1 (1990) Rigid Steel Conduit - Zinc Coated

3.2. AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) BOILER AND PRESSURE VESSEL CODE.

- Section 9.83 Welding and Brazing Qualification Addenda: 1986.

3.3. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).

- ASTM A36 Structural Steel
- ASTM A 123 (1989a) Zinc (Hot-Dipped Galvanized) Coatings on Iron and Steel Hardware
- ASTM A 153 (1982; R 1987) Zinc Coating (Hot-Dip) on Iron and Steel Hardware

- ASTM A193-88 Alloy-Steel and Stainless Steel Bolting Materials for High Temp. Services.
- ASTM A285-82 Pressure Vessel Plates, Carbon Steel, Low and Intermediate Tensile Strength.
- ASTM C881-99 Epoxy-Resin-Base Bonding Systems for Concrete.

3.4. ASME INTERNATIONAL (ASME)

- ASME B1.1 (1989; B1.1a) Unified Inch Screw Threads (UN and UNR Thread Form)

3.5. AMERICAN WELDING SOCIETY (AWS).

- AWS D 1.1-88 Structural Welding Code.

3.6. COMMERCIAL ITEM DESCRIPTIONS (CID).

- CID A-A-50553 (Rev E; Notice 1) Fitting for Conduit, Metal, Rigid (Thick-Wall and Thin-Wall EMT Type)

3.7. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA).

- NEMA AB 1 (1986; Rev 1) Molded Case Circuit Breakers and Molded Case Switches
- NEMA FB 1 (1993; Rev 1) Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies
- NEMA ICS 1 (1988; Rev 1, 2 & 3) Industrial Controls and Systems
- NEMA ICS 2 (1988; Rev 1) Industrial Control Devices, Controllers and Assemblies
- NEMA ICS 6 (1988; Rev 1) Enclosures for Industrial Control and Systems
- NEMA MG 1 (1987; Rev 1 & 2) Motors and Generators
- NEMA ST 1 (1988) Specialty Transformers (Except General-Purpose Type)
- NEMA WC 7 (1988) Cross-Linked-Thermosetting- Polyethylene-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy

3.8. NATIONAL FLUID POWER ASSOCIATION - NFP(A) PUBLICATIONS:

- T2.6.1M S7-75 Quick Disconnect Pressure Rating; Supplement No. 5,
- T3.9.17 R1-90 Hydraulic Fluid Power - Positive Displacement Pumps - Method of Testing and Presenting Basic Performance Data.
- T3.20.1-73 Glossary for Fluid Power Quick Disconnect Couplings.

3.9. SOCIETY OF AUTOMOTIVE ENGINEERS (SAE).

- SAE J516-87 Hydraulic Hose Fittings
- SAE J517-88 Hydraulic Hose
- SAE J524 Seamless Low Carbon Steel Tubing Annealed for Bending and Flaring.

SAE J1273 Selection, Installation, and Maintenance of Hose and Hose Assemblies.

3.10. STEEL STRUCTURES PAINTING COUNCIL (SSPC).

SP 10-82 Surface Preparation Spec. No. 10 Near-White Metal Blast Cleaning.

3.11. UNDERWRITERS LABORATORIES (UL).

UL 44 (1991; Rev thru Jan 1993) Rubber-Insulated Wires and Cables

4. GENERAL REQUIREMENTS – QUOTATION SUBMITTALS

4.1. Experience Qualifications. The tow haulage units and equipment furnished under this contract shall be the product of a manufacturer normally engaged in the production of outdoors hydraulic winching units. The Contractor shall demonstrate suitable experience by submitting evidence of having at least five (5) successful outdoors installations of hydraulic winching units (with levelwind systems) with greater or equal to linepull and same design levelwind system as will be furnished under this contract. These successful installations shall have been in satisfactory operation for at least two years. The Contractor shall submit details of successful installations including contract numbers, addresses, phone numbers, point of contact, for the cited tow haulage units. The Contractor shall furnish the experience qualification submittal to the Contracting Officer for approval along with the quotation.

4.2. Component Qualifications. The Contractor shall furnish to the Contracting Officer for approval along with each of the Experience Qualification submittals, the following specific item details:

4.2.1 Catalog cuts for the installed units identifying the model number and rated linepull (i.e. pounds, fpm). Catalog cuts shall describe hydraulic drive and levelwind system.

4.2.2 Parts List for installed units, identifying hydraulic motor name/model and hydraulic pump name/model.

4.3. Other Qualifications. The Contractor shall furnish to the Contracting Officer for approval the following specific item details:

4.3.1 Catalog cuts or design as evidence that sound enclosure that will meet requirements of Paragraph 8.2: Environmental Operating Conditions.

4.3.2 Dimensional data for proposed units, to identify that the units could be fitted within the dimensional constraints shown on the Attachments to this Scope of Work.

4.3.3 Provide certification that the construction of all Tow Haulage Unit control panels will comply with the requirements of Underwriter's Laboratories Industrial Control Panels listing and follow-up service.

5. SUBMITTALS. The following items shall be submitted to the Contracting Officer for approval within 45 calendar days of the date of award of contract. The submittals shall be neat, legible, and of sufficient size so as to be easily read. Submittal data shall become part of the O&M manual to be compiled by the Contractor.

(1) Outline shop drawings of the tow haulage winch showing all pertinent dimensions of the winch and hydraulic power unit including mounting methods. The drawings shall show that the proposed equipment meets the specified dimensional criteria.

(2) Dimensioned cross sectional shop drawing(s) of all Contractor-fabricated components including: winch drum/axle, baseplate, wire rope levelwind system, control stand, pawl engagement system, and emergency shutoff limit switch system. Drawings shall show materials (i.e. ASTM designation or UNS designation), weld symbols, dimensions, tolerances, and surface finishes.

(3) Hydraulic performance data for both the hydraulic pump and hydraulic motor to include speeds, pressures, flowrates, and industry power ratings. Standard hydraulic friction loss data for the piping, hoses and fittings shall be

used in computations. Include an itemized list of all of the components of the hydraulic system to include model numbers and sizes. Include manufacturer's catalog literature for all purchased hydraulic components including: pump, motor, valves, hose assemblies, piping/tubing solenoids, and electrical controls.

(4)Detail drawing of hydraulic circuit diagram of the hydraulic power unit. Show all lines, pilot lines, connections, valves, pumps, motors and controls. Drawing shall use industry standard NFPA or ISO symbols. Include a circuit logical description/narrative for each mode of operation to include the pressure / flow settings and functions for all controlling circuits.

(5)Include manufacturer's catalog information to describe make and model number for: electric motor, wiring, bearings, gear reducer, and electrical switches and controls. Include certified electric motor performance curve.

(6)Anchor bolt drawing(s) showing anchor bolt layout, installation instructions, epoxy resin specifications / manufacturers, and required embed for specified concrete strengths.

(7)Control panel drawing including cabinet dimensions control layout, and attachment to the tow haulage baseplate.

(8)Supply a sample nameplate (photo reproduction) to be used on the control panels.

(9)Detail electrical drawings of power and control electrical schematics.

(10)Technical data as specified in PARAGRAPH 12: REVIEW OF TECHNICAL DATA.

(11)Certification that tow haulage unit furnished complies with all ANSI B30.7 requirements.

6.0. TOW HAULAGE WINCH

6.1. General. The tow haulage units shall be supplied in a condition ready for power wiring and anchorage installation in the field. Dimensional constraints shown on the drawings are due to buildings and fixed structural details which must not be infringed on by the tow haulage unit. The contract drawing shows the general positioning and envelope limitations under which these tow haulage units will be installed.

6.1.1. The tow haulage unit shall be suitable for gradually applying a load to floating plant barges to gradually accelerate the load and make way out of the lock chamber. The unit shall also have the capability to arrest the momentum of the load during drum payout through the use of hydraulic (dynamic) braking. Heat generated by this process shall be dissipated through the hydraulic reservoir or an air over oil heat exchanger. A disk brake may be furnished on the input side of the gearbox to provide the required braking.

6.1.2. The tow haulage unit shall be designed and fabricated to be in accordance with ANSI B30.7. The tow haulage unit furnished shall be certified in writing by the Contractor to be in accordance with ANSI B30.7.

6.2. Datum. All elevations or distances in these specifications are given with reference to the centerline of the fairlead and the top of the lockwall for each lock.

6.3. Winch Capacity. The winch shall be capable of not less than 12,000 lbs. pulling force on a single part line of ½ inch diameter wire rope on the second layer of the drum. The drum shall be capable of holding 500 feet of wire rope cable. The drum shall be fabricated from steel, welded in accordance with AWS D 1.1 and thermally stress relieved before machining. The end of the drum shaft shall include a mechanical counter system for total rotations as a tool in maintenance and service.

6.3.1. Wire Rope. Provide 500 feet of 6x37 IWRC preformed stainless steel wire rope furnished installed onto the winch drum ready for use. Make a flemish eye splice at the free end of the rope with each rope leg of the splice 84-inches. Install a stainless steel swage to seize the splice ends. Secure the rope assembly to the drum.

6.4. Baseplates. The winch and HPU shall be mounted on ASTM A36 structural steel baseplates reinforced and stiffened to accommodate dynamic loads and minimize deflections that could cause operational or fatigue failures to

components. The baseplates shall be welded in accordance with AWS D 1.1 and stress relieved before machining. All surfaces used to mount rotational components or locate critical components shall be machined to 125 micro-inch finish. Baseplates shall be designed for drainage to not pond water and shall be designed to mount with anchor bolts directly to a concrete surface.

6.4.1. Anchor bolts. The Contractor shall design the epoxy anchor bolt installation detail for these tow haulage units, assuming that these units will be anchored to sound concrete on the lock walkways. The design shall consist of load calculations and required epoxy-resin characteristics described in terms of ASTM C881 classification criteria. Precut threaded rod anchor bolts with nuts with washers shall be furnished by the Contractor to secure the tow haulage unit baseplates to the lockwall concrete. The Contractor shall also furnish the design and installation instructions for the anchor bolt installation. Anchor bolt systems shall consist of ASTM A 193-B7 stainless steel threaded rod each with two flatwashers and two silicon bronze nuts. Anchor bolts shall be considered to have additional length required to protrude through the soleplates, the baseplates, and the grout pads under the tow haulage units. The Contractor shall design the anchor bolt installation to include anchor bolt embed length and core drilled hole diameter based on assumed 2500 psi compressive strength concrete. The Contractor shall identify and submit the brand name and model numbers for at least three different manufacturers of epoxy/resin material to be used for installing these anchorages. Required anchor bolt data shall be submitted as a part of the outline (shop) drawing submittal.

6.5. Levelwind System. Levelwind system shall keep wire rope properly wrapped and tensioned on drum in event of slack cable condition. Levelwind shall wrap the wire rope onto drum as close to the previous wrap as possible, so that there are no lateral gaps between successive wraps. For multiple layer wire rope drum design, the levelwind system shall automatically guide rope at directional transitions between layers. The levelwind system shall be operated from the drum shaft through a chain and sprocket drive system. The “thumb” shall be made of bronze and easily replaceable. The levelwind system and respective fleet angle shall be based on the existing location of the wire rope fairlead and existing electrical driven tow haulage winches.

6.6. Winch Drive Construction.

6.6.1. General. The winch drive shall consist of a gear reducer, hydraulic motor and hydraulically released disk brake that drives the wire rope drum.

6.6.2. Gear reducer. The gear reducer shall be planetary type or helical / bevel type manufactured and selected in accordance with AGMA standards. The reducer shall bolt to the baseplate and support the hydraulic motor and brake unit, with output of the reducer connected to the drum shaft. The gear reducer shall include a drain plug at sump bottom (as installed), a lubricant sump bottom surface that everywhere slopes down to the drain plug/hole, a filler plug / dipstick assembly, antifriction bearings for all shafts, and elastomeric lip seals for all exposed shafts.

6.7. Hydraulic Motor. The hydraulic motor shall be axial piston type, sized to develop the required range of speeds at system torque and system pressure.

6.8. Drum. The drum shall be fabricated from steel and welded to AWS D 1.1 standards. The drum shall be fully stress relieved and machined for proper mating of components. The drum shall be fitted with shell plate lagging, grooved for ½ “ diameter wire rope. If drum is designed to use multiple layers of wire rope for this application, drum shall have drum grooving design similar to “Lebus” grooving design to minimize damage at rope crossover points.

6.9. Pawl. The winch drum shall be lockable in a fixed position by engaging a pawl that mates with ratchet cogs on the drum. The pawl is activated by a manual lever, which is spring loaded or over center mounted to prevent accidental engagement when operating. Description of the manual lever shall be submitted as a part of the detailed shop drawings for approval. The ratchet and pawl shall be designed to withstand at least 30,000 pounds.

6.10. Miscellaneous. The entire tow haulage unit including the hydraulic components shall have no exposed corrodable surfaces. All nuts, bolts, and assembly hardware shall be ASTM A 193 corrosion resisting steel or silicon bronze, or as approved. All “O”-rings, seals, and bearings will be of a standard commercially available

variety. Any special tools or fixtures required for assembly, disassembly, or repair of the hydraulic motor shall be furnished with the first winch delivered.

7. HYDRAULIC POWER UNIT.

7.1. Electric motor. The motor shall be of the horizontal-shaft, squirrel-cage induction type NEMA design B, designed for full-voltage starting, of waterproof, totally enclosed, fan-cooled or non-ventilated frame construction and shall conform to the applicable requirements of NEMA MG 1.

7.1.1. Motor Ratings. The rating shall exceed the maximum required brake horsepower by 5% at the maximum line pull load and speed test condition specified in Paragraph 10. The motor shall be rated for continuous full-load operation without exceeding the standard temperature rise for the class of insulation and frame construction used, and it shall be wound for 460 volts, three-phase, 60-Hz operation.

7.1.2. Frames and Shafts. Size and dimensions of frames shall conform to NEMA MG 1 and shaft extension shall be as required. Eyebolts shall be provided on all motors. Each motor shall be provided with a drain-breather which shall be so located to prevent accumulation of water inside the motor. Frames shall have corrosion prevention in accordance with the requirements of paragraph PAINTING. Exposed portions of shafts shall be treated with the manufacturer's standard primer and two coats of moisture proof varnish per the manufacturer's recommendation.

7.1.3. Windings and Insulation. Insulation shall be Class F or better as required for design conditions with special moisture, and oil-proof treatment. Motors shall be designed and constructed to withstand the environmental conditions specified. The following specifications describe the minimum requirements for acceptable insulation and are not intended to restrict or prohibit the use of materials or method which will give equal or better performance.

7.1.4. Insulated Windings. Insulated windings, unless otherwise approved, shall be completely assembled in the motor core before impregnating with the insulating compound. Insulating compound shall be 100 percent solid. Impregnation of the windings with the insulating compound shall be by vacuum impregnation method followed by baking. The procedure shall be repeated as often as necessary to fill in and seal over the interstices of the winding, but in no case shall the number of dips and bakes be less than two dips and bakes when the vacuum method of impregnation is used.

7.1.5. Magnet Wire. The magnet wire shall have an insulation or combination of insulations with an insulation thickness not less than that required for the environment specified and the temperature rating as required by the hot-spot temperature of the motor.

7.1.6. Winding Heaters. A heater or heaters shall be installed in the motor frame or end bells or wrapped around the winding end turns. Heaters shall meet the requirements of paragraph 7.8: HEATERS-GENERAL. Heaters installed around the winding end turns shall consist of the required turns of heating cable wrapped around the end turns and secured in place before the motor windings are impregnated.

7.1.7. Bearings and Lubrication. The motors shall be provided with anti-friction bearings, and the design of the housing and method of assembly shall permit ready removal of the end brackets and prevent escape of lubricant and entrance of foreign materials. Bearings shall be of and approved pre-lubricated type requiring no addition or change of lubrication for a period of at least 5 years. Pressure lubrication fittings may be used provided the housings are properly vented to prevent damage to the seals. When equipment is to be assembled adjacent to or bolted to the motor end bell, suitable filler and drain pipe extension, with the ends properly fitted and easily accessible, shall be provided.

7.1.8. Terminal Leads. Terminal leads shall extend outside the frame; shall have insulation equivalent to that of the motor winding; shall be terminated in a two-piece, watertight terminal box secured rigidly to the motor frame; and shall be suitably identified. Leads shall be positioned and sealed where they pass through the frame with a water-resistant seal of a synthetic rubber material or a synthetic rubber gasket. Terminal box shall have threaded conduit entrances on a minimum of four sides.

7.1.9. Machine Work. Machine work shall be accurate, of high quality, and in conformity with approved standard practice. Threads shall be in accordance with ASME B1.1. Thread fittings shall be Class 2. Threads on all body-bound bolts shall be chased a sufficient length so that when the nut is tightened there will be approximately one and one-half full threads under the nut. All bolts and cap screws shall be provided with lock washers.

7.1.10. Designation and Marking. Motor nameplates of a suitable corrosion-resisting material shall be attached to the frame of each motor and shall indicate clearly the motor NEMA temperature and insulation class, continuous amperage rating, voltage rating, operating frequency, rated RPM, horsepower rating, nominal efficiency, NEMA locked rotor code letter and serial number. In addition, the nameplate shall show a lead connection diagram. Identification or serial numbers shall show a lead connection diagram. Identification or serial numbers shall be die stamped on the frame.

7.2. Hydraulic System. The hydraulic power unit shall be assembled as a package. The reservoir shall be equipped with an oil level indicator, temperature gauge, filler breather, drain, cleanouts and internal baffle. The system shall have a 0 - 3,000 PSI, liquid filled, pressure gage. The hydraulic system shall be fully plumbed using pressure rated hard pipe or mechanical tubing. Hydraulic hose assemblies shall meet or exceed SAE J517 100R2 pressure rating, shall have SAE J516 end fittings, and shall be selected/installed in accordance with SAE J1273.

7.3. Hydraulic Reservoir. The hydraulic reservoir will have a minimum capacity of 50 gallons. The reservoir shall have a drain hole with removeable plug at the reservoir bottom and the entire reservoir bottom surface shall slope downward to the drain hole. The reservoir shall also be provided with a 110 V.A.C. immersion heater with a watt density that does not exceed 10 watts per square inch of element area and provides pre-warming of hydraulic oil before operation in ambient temperatures of -15 to 40 degrees F. The heater element shall be installed in a dry well to permit removal without draining the hydraulic Reservoir. The hydraulic oil for operation of the unit shall be furnished in closed sealed containers or in the hydraulic reservoir, as directed by the Contracting Officer. Sufficient oil shall be furnished to fill the system to its normal operating levels. Steel used in the reservoir shall conform to ASTM A285. All welding on the reservoir shall be in accordance with ASME Boiler and Pressure Vessel Code.

7.4. Control System. The scheme of operation for the tow haulage control system shall be as described and indicated. The control system shall include the controller, control panel, pendant control station, and such other items as may be required to accomplish the operating features specified. The control panel shall be provided with a 2-position key-operated switch to allow transfer of control from control panel to pendant station. A red pilot light mounted on control panel shall be provided to indicate that the control has been transferred to pendant station. Note that the 2-position key-operated switch and red pilot light are not illustrated on the control panel shown on drawing M-LG-33/028, Attachment (2), but are still required. Selection of one operating station shall lock out the controls of other stations. Each item shall be installed and tested as specified and shall be complete and ready for operation in accordance with the scheme of operation. The control system for the hydraulic power unit shall be protected by an automatic safety shutdown system located in the control panel. The shutdown system shall monitor the hydraulic oil level and temperature as well as the motor amperage and voltage for all three phases. The control system shall include the following items as indicated:

Control Panel and Pendant Station shall include:

- a) Joy-stick for stepless speed control of in-haul and payout functions.
- b) System start-stop button.
- c) Brake on/off switch which prevents accidental engagement in a haulage mode.
- d) Three-position selector switch for: (1) high speed, (2) low speed, and (3) drag function. High-low switch positions shall determine speed, except when the unit senses high line pull, where the unit shall switch from high to low speed automatically. Drag function is specified in Paragraph 1.1 of this specification.

Control Panel shall include:

- a) Two-position key-operated switch to allow transfer of control from control panel to pendant station
- b) RESERVED

Control panel indicator lights shall be furnished for:

- a) constant tension condition.
- b) brake activation.
- c) oil low level.
- d) high temperature.
- e) clogged filter (based on reading pressure drop across the filter).
- f) control transferred to pendant station.

7.4.1. Emergency Shut-off Limit Switch System. The contractor shall design and furnish a safety system that automatically shuts off the winch if a person is drawn towards the levelwind as rope is reeved. The system shall include a flat "catch fence" barrier which and mounts in front of the rope levelwind and actuates an electrical limit switch. The catch fence shall be a rectangular structure with area as wide as the winch baseplate and at least 3-feet tall. The catch fence shall be open framed steel construction with expanded metal grating (design similar to Ryerson Skywalk) welded to a fabricated (welded) structural steel framework. Each cut end of expanded metal shall be welded to the structural steel framing. The grating at the center of the catch fence shall have a framed opening designed so that a gloved hand caught on the hauling rope cannot fit through the opening without causing winch shutoff. The catch fence shall be bottom-hinged with its two positions (on/off) approximately 10-degrees either side from vertical with threaded adjustable end of travel stops so that the fore/aft actuation / return forces on the catch fence do not bear directly on the limit switch. The catch fence bottom hinges shall be greasable pillowblock bearings bolted directly to the winch baseplate weldment. The system shall include a durable all-weather outdoor rated (NEMA 4, 12 & 13) lever type limit switch (similar to Square D 9007 series) securely mounted to the winch baseplate at least 18-inches above the concrete surface. The limit switch shall be spring return to off so that it automatically resets after trip when the catch fence is tilted back to its off position. The catch fence weldment shall be painted safety yellow in accordance with specified painting procedures.

7.5 Control Stand Controls. The control stand controls shall be configured so that they can be easily mounted on either side of the HPU as depicted on the contract drawings. Control stand fabrication shall be similar to Control Panel fabrication requirements. Sufficient length of wire, conduit, (and hydraulic hose, as applicable) shall be furnished to allow mounting the control panel on either side of the HPU without rewiring or having to remake electrical connections. The control stand structural connection to the HPU baseplate shall be a rigidly bolted connection plate.

7.6 Pendant Control Station. Pendant control station enclosure shall be NEMA Type 4X. Physical size of pendant shall be held to a minimum. Pendant Control Station Features shall include.

- a) Cable grip clamps to provide a watertight sealed connection between cable and enclosure.
- b) Ample enclosure space for switch wiring.
- c) An elastic, chemically resistant gasket to ensure a tight seal between two enclosure halves.
- d) Switches protected from internal and external contaminants.
- e) Threaded ultra-sonic inserts with enclosure to prevent lost hardware during assembly
- f) Common circuit pre-wired on all switches.
- g) A shrouded knock-out hole for option pilot light or horn button
- h) Ergonomic design for increased comfort and decreased fatigue.
- i) Impact resistant pendant enclosure, double insulated, chemically resistant and rate NEMA 1, 3, 4, 4X, and 12.
- k) Mechanical interlocks on single- and two-speed switches for enhanced safety.
- l) Cumulative contactas on two- and three-speed switches shall provide a precise detent feel.
- m) Switches rate 3-amp, 250-volt AC.
- n) Stainless steel wire mesh cable grip at pendant station and control panel connections.
- o) Removable button hoods and nameplates.
- p) Operating temperature range: -10deg. F to 150deg. F.
- q) UL/CUL listed.
- r) 25-feet of Round control cable with integral strain relief; Yellow, cold-weather, heavy-duty outer jacket. Conductor minimum 16AWG, quantity as required.

7.6.2 Pendant station shall be similar to series SBP2 pendant pushbutton stations as manufactured by Electromotive Systems division of MagneTek, P.O. Box 13615, Milwaukee, WI 53213, (800) 288-8178 or equal.

7.7. Control Panel.

7.7.1. Motor Controller Type. The motor controller shall be of the full-voltage magnetic type initiated by the push-button control station and controlled automatically.

7.7.2. Protection. The controller shall provide inverse-time-limit overload protection, or other protection as indicated or specified. The hydraulic power unit shall be protected by an automatic safety shutdown system located in the instrument panel. The shutdown system shall monitor the hydraulic oil level and temperature as well as the motor amperage and voltage for all three phases. The protection shall be accomplished by suitable relays conforming to the requirements of paragraph 7.7.7: RELAYS. Overload relays shall provide protection during both the starting and running conditions, and approved means shall be provided to manually reset the relays without opening the enclosing case of the control panel. Controller disconnecting circuit breaker[s] shall be interlocked with the controller enclosing case access door to permit opening or closing the access door only when the disconnect is in the "OPEN" position.

7.7.3. Enclosure. Enclosing cabinet shall be of the NEMA Type 3R stainless steel and moisture-resisting construction meeting the requirements of NEMA ICS 6. Enclosing cabinet shall be designed for mounting on the hydraulic power unit frame. Suitable padlock eyes shall be provided to allow locking the exterior door in the closed position. Padlocks shall be provided with each controller and chained to the enclosing case. The chain shall be of a nonferrous material resistant to corrosion. Only front-connected devices shall be used, and clearances shall be in accordance with NEMA ICS 1 requirements. Threaded hubs for conduit entrance of the welded-in type shall be provided as required to make the wiring connections. An automatic breather-drain, not less than 3/8-inch size and located in a protected location and at the lowest point of the enclosure, shall be provided.

7.7.4. Air Circuit Breakers. Air circuit breakers as specified shall be provided and assembled in the housing of each controller.

7.7.4.1. Circuit Breakers - General. Each air circuit breaker shall conform to the applicable requirements of NEMA AB 1. The circuit breakers shall be manually operated and shall be of the instantaneous trip type, unless otherwise specified or indicated. All poles of each breaker shall be operated simultaneously by means of a common handle and shall be enclosed in a common molded plastic case. The contacts of multipole breakers shall open simultaneously when the breaker is tripped manually or automatically. The operating handles shall clearly indicate whether the breakers are in "ON," "OFF," or "TRIPPED" position. Each circuit breaker shall be externally operated as specified in paragraph PROTECTION. Approved means shall be provided for padlocking the breaker operating handle(s) in either the "ON" or "OFF" position. A padlock of the same type as specified in paragraph 7.7.3: ENCLOSURE, shall be provided for each breaker and shall be chained to the enclosing case. The circuit breakers shall be products of only one manufacturer and shall be interchangeable when of the same frame size.

7.7.4.2. Trip Units. Except as otherwise indicated, the circuit breakers shall be provided with combination thermal and instantaneous magnetic trip units. The minimum frame sizes and the trip unit ratings shall also be as required for the equipment controlled. Nonadjustable instantaneous magnetic trip unit shall be set as approximately 10 times the continuous current ratings of the circuit breakers.

7.7.4.3. 480-Volt AC Circuits. Air circuit breakers for 480-volt AC circuits shall be rated 600 volts AC and shall have a minimum NEMA interrupting capacity of 14,000 symmetrical amperes at 600 volts AC.

7.7.4.4. 120-Volt AC Circuits. Air circuit breakers for 120-volt AC circuits shall be rated not less than 120/240 or 240 volts AC and shall have a minimum NEMA interrupting capacity of 10,000 symmetrical amperes.

7.7.5. Assembly of Controller. The Contractor shall furnish all necessary air circuit breakers, contactors, relays, resistors, interlocks, master switches, limit switches, or other devices required by the scheme of operation. The panel for mounting the relays and contactors shall be sheet steel of sufficient thickness to provide rigid support for

the equipment mounted thereon. The steel panel shall be given a corrosion resisting treatment in accordance with the requirements of paragraph 8.1: PAINTING. Interior color of the control panel shall be white.

7.7.5.1. Wiring. Insulated wire shall conform to the requirements of paragraph 7.9.1: CONDUCTORS. All wiring shall be securely held in place and arranged in a neat and orderly manner in horizontal and vertical runs. All wiring passing through steel gutters shall be protected by grommets, unless the openings in the steel gutter are formed to protect the wiring from damage. All controllers shall be wired in like manner as to location of parts and phase sequence. The wire and terminal numbers shall be neatly and legibly identified in an approved manner. Terminal blocks shall be used for making all external connections.

7.7.5.2. Terminal Blocks. Terminal blocks for control wiring shall be molded type with barriers, rated not less than 600 volts, and they shall be provided with covers. The terminals shall be removable, screw type, or of the stud type with contact and locking nuts. The terminals shall be not less than No. 10 AWG in size and shall have sufficient length and space for connecting at least two indented terminals on No. 10 AWG conductors to each terminal. The terminal arrangement shall be submitted as a part of the shop drawings for approval. Not less than 10 percent, but in no case less than 2 percent, spare terminals shall be provided on each block. Terminal blocks for conductors larger than No. 10 AWG or with a capacity of more than 30 amperes shall be adequate for the purpose intended, having length and space for at least two indented terminals of the size required on the conductors to be terminated. For conductors rated more than 50 amperes, all screws shall have hexagonal heads. For conductors rated 50 to 99 amperes, the minimum screw size shall be 5/16 inch. Conducting parts between connected terminals shall have adequate contact surface and cross section to operate without overheating.

7.7.5.3. White or other light-colored marking strips, fastened by screws to the molded sections at each block, shall be provided for circuit designation. Each connected terminal of each block shall have the circuit designation or wire number placed on the marking strip with permanent marking fluid. One reversible or one spare marking strip shall be furnished with each block.

7.7.6. Magnetic Contactors.

7.7.6.1. Contactor Ratings. All heavy-duty magnetic contactors shall be of the voltage rating indicated on the drawings or otherwise required. They shall have a horsepower rating not less than the horsepower rating of the motor with which the controller is to be used, but in no case shall the contactor used be smaller than NEMA, Size 1. The contactors shall meet the requirements of NEMA ICS 2 and have continuous current ratings for the duty indicated. Contactors shall be suitable for at least 200,000 complete operations under rated load without more than routine maintenance. They shall operate successfully on 10 percent over-voltage and 15 percent under-voltage. The interrupting capacity shall conform to NEMA standards. Mechanical interlocking between contactors shall be provided as indicated or required and shall be accomplished without any mechanical attachment between the interlocking mechanism and the moving parts of the contactor.

7.7.6.2. Arcing Protection. For each pole, the interruption arc and flame shall be minimized by suitable arc chutes or other means so that no damage will be done to other portions of the device. The arc chutes, if provided, shall be easily removed without removing or dismantling other parts.

7.7.6.3. Contactors. All current carrying surfaces shall be of a silver alloy or of copper faced with a silver alloy and shall be easily accessible and removable for replacement. Contactor shall operate without chatter or perceptible noise while energized. Coils shall be suitable for continuous operation on the voltage specified.

7.7.6.4. Construction. Each contactor shall be provided with a minimum of three auxiliary contacts, which may be easily changed from normally open to normally closed. Contactor construction shall be such as to prevent corrosion.

7.7.7. Relays.

7.7.7.1. Control. Control relay devices shall meet applicable requirements of NEMA ICS 2 for Class A600 contacts. All contacts shall be of a silver alloy or of copper faced with a silver alloy.

7.7.7.2. Overload. Overload relays shall be the adjustable thermal type with normally closed control circuit contacts having a pilot and control circuit contact rating of A600, in accordance with NEMA ICS 2, and shall have combination manual and automatic-type reset. They shall have inverse-time tripping characteristics simulating the heating characteristics of the motor, shall protect the motor with which used against exceeding its specified temperature rise under any overload, stalled rotor, or single-phase condition, and shall be self-protecting under all conditions, except short circuit. A relay consisting of an assembly of individual-phase thermal elements actuating a common tripping bar shall be used. The means of adjustment shall provide a range from 90 percent to 110 percent of the heater rating and shall be sufficiently accurate to allow setting the relay at the full-load current value of the motor with which used. Reset mechanism shall be trip free and arranged for manual reset in accordance with paragraph 7.7.2: PROTECTION, unless automatic reset is indicated. Reset mechanism shall be of design that will permit changing from manual to automatic reset or vice versa without the use of special tools.

7.7.8. Control Transformer. The control transformer shall be a standard, single-phase, 60-Hz, dry-type, 480/120 volts, and with kVA rating sufficient to supply the control and heater circuits. Transformer shall meet applicable requirements of NEMA ST 1.

7.7.9. Control Circuit Breakers. The control circuit breakers shall conform to the requirements of paragraph 7.7.4: AIR CIRCUIT BREAKERS, except that an external operating mechanism is not required. Breakers shall be two-pole, 100-ampere frame, and 20-ampere continuous current rating.

7.7.10. Indicating Lights. Indicating lights shall be complete with low-voltage lamps, self-contained resistor or transformer units, and lens or color caps. Lens and lamp shall be removable from the front. They shall operate on 120 volts AC and be suitable for flush or semiflush mounting to the exterior cabinet door. Exterior mounting of the indication lights shall meet the requirement for the enclosure NEMA type. Hinge wire shall be used for connections between the indicator lights and the terminal block.

7.7.11. Equipment and Door Nameplates. Nameplates shall be provided for the front of the cabinet door and for each item of equipment within the enclosure. Anodized aluminum, stainless steel, or a laminated plastic sheet with black surface layer and a white bottom layer not less than 1/16 inch thick shall be used for the nameplate material. Equipment within the enclosure shall be identified by nameplates or other suitable marking on the equipment unit base or on the panel.

7.7.12. Heater. The heater shall be strip type and meet the requirements of paragraph 7.8: HEATERS-GENERAL.

7.7.13. Grounding. The ground connection for the controller enclosing cabinet shall be made by a threaded post fitting which extends through the enclosure wall and which is provided with fittings to connect No. 6 AWG stranded copper ground wire both inside and outside the enclosure. Inside the enclosure, the ground circuit shall be extended with No. 6 AWG stranded copper wire from the connector to the panel.

7.8. HEATERS - GENERAL. heaters strip type constructed with a chrome-nickel heating element embedded in a refractory insulating material and encased in an approved watertight, corrosion-resisting, nonoxidizing metal sheath. The rate of heat dissipation shall be uniform throughout the effective length. Watt density shall not exceed 20 watts per square inch for chrome-nickel type.

7.8.1. Heater Ratings. Heaters shall be of such rating that, when energized, the temperature of the windings or will be held approximately 10C above ambient. They shall be designed for 120 volts AC and for continuous operation under the conditions of installation. The rate of heat dissipation shall be uniform throughout their effective length.

7.8.2. Insulation. Insulation for the heating cable (winding wrap around type) heaters shall be suitable for a conductor temperature of 180C.

7.8.3. Heater Terminals. The terminals of the heater, including the leads, shall be watertight. The leads shall be terminated and sealed in a watertight terminal box located as selected by the motor manufacturer. The method of sealing shall be as specified for the motor winding leads.

7.8.4 Enclosure Condensation Heaters. Provide control panel enclosures with thermostat controlled fan-driven condensation heater units. Heater shall have an anodized aluminum housing, 0 to 100 degrees F. adjustable thermostat, ball bearing fan, and terminal block. Size units in accordance with manufacturer's recommendations to maintain a temperature rise 20 degrees F. above ambient. Hoffman Bulletin D-85 or equal.

7.9. WIRE AND CONDUIT

7.9.1. Conductors. Conductors shall conform to all the applicable requirements of NEMA WC 7 and shall be of annealed copper wire. Copper conductors shall be insulated with polyethylene. Conductors shall be Class B or Class C stranding, except for hinge wire which shall be Class D or K stranding. Unless otherwise specified, all wire and cable for power and control shall be single conductor. Insulation thickness shall be that required for a rated circuit voltage of 0 to 600 volts and, except for the cross-linked polyethylene grades, shall be not less than that required by Table 3-1 of NEMA WC 7, column B. Insulation shall be a cross-linked thermosetting polyethylene insulation type of compound conforming to requirements of NEMA WC 7. Over the insulated conductor there shall be applied a moisture resisting thermoplastic jacket meeting the requirements of NEMA WC 7, Part 4. The jacket thickness shall be as specified in NEMA WC 7, Table 4-4. The method of accomplishment shall be in accordance with the current practice of the industry. Wire for power and motor circuits shall have a current carrying capacity corresponding to the ampere rating of the circuit's air circuit breaker and not less than No. 12 AWG and the full-load current of the motor or the circuit. Wire for control circuits shall not be smaller than No. 14 AWG.

7.9.2. Control Wire. All control wire shall be type SIS switchboard wire meeting the requirements of UL 44.

7.9.3. Conduit. Rigid steel conduit shall conform to ANSI C80.1 and shall, in addition, be zinc-coated (galvanized) both inside and outside by the hot-dip method.

7.9.4. Fittings. Conduit fittings shall conform to the requirements of NEMA FB 1 and CID A-A-50553.

7.9.5. Assembly. The motor, control stand, control panel, and limit switch shall be installed as shown on the contract drawing Attachment (1) and as specified.

7.9.5.1. The conduit and wiring connections external to these previously mentioned items of electrical equipment which are installed on the HPU and winch frames shall be furnished, installed, and connected complete and ready for operation. The conduit and wiring connections to the remotely located control equipment and the incoming power connections will be made by others under a subsequent contract.

7.9.5.2. All wiring shall be installed in rigid hot-dip galvanized metal conduit with threaded-type fittings (Condulets) and zinc-coated watertight outlet and pull boxes. The conduit shall be securely mounted and fastened to the framework and shall be installed in a neat and workmanlike manner. Change of direction of a conduit run shall be made by means of threaded-type fittings (Condulets) or factory fabricated bends, and the conduit shall be installed to fit close to the framework. Conduit unions shall be used whenever it is necessary to join conduits that are to be turned right and left. No running threads will be permitted. Ends of conduits shall be carefully reamed. All threaded connections shall be made up with electrically conductive colloidal copper rust-inhibiting compound or other suitable compound. Separate conduit systems shall be provided for power and control circuits. The entire conduit system shall be grounded and shall be installed so that any moisture will be drained away from terminal boxes and equipment. All conduit connections to equipment enclosures shall be of the watertight threaded type. Suitable "drain-breather" devices shall be provided at all low points of the conduit system to prevent an accumulation of water. All conductors shall be terminated in an approved manner. Indented terminals shall be used on No. 12 AWG and larger conductors and shall be terminated on screw or stud terminals. Toothed lock washers shall be used on all screw terminals and locking nuts or lock washers shall be used on all stud terminals.

8.0. ENVIRONMENTAL.

8.1. Painting. The entire tow haulage unit shall have no exposed corrodible surfaces. Those components normally primed and finish coated by the manufacturer in a manner suitable for outdoors exposure (gearbox, hydraulic pump etc.) need not have any further painting applications. Any fabricated steel and all corrodible components (that are not factory coated) shall be painted with the following paint system (or approved equal): Steel fabricated items shall

be blast cleaned in accordance with SSPC Spec. No.10. Purchased items shall be surface prepared using the approved / recommended SSPC surface preparation method. Prime coat shall be three mil (DFT) zinc rich primer "Amercoat #68HS" (as manufactured by Ameron Protective Coatings, Brea, CA. 92622-1020.). The topcoat shall be five mil (DFT) medium-gray "Amercoat #383 HS."

8.2. Environmental Operating Conditions. The HPU and haulage unit shall be designed to operate outdoors in all weather conditions from -15 degrees F. to 95 degrees F. without damage to the unit. The hydraulic pump and motor shall be provided with a removable, acoustically treated cover to prevent excessive noise generation. Noise levels measured at 3-foot distance from the HPU/haulage unit sound enclosure shall not exceed 85 dbA steady state expressed as a time-weighted average (TWA) (assuming unit runs for 20% of an 8 hour exposure period). Noise level impulses measured at these same locations shall not exceed 140 dbA. The cover shall also protect wind driven rain or snow from depositing on the hydraulic pump and hydraulic circuit components, so as to avoid operational problems during adverse weather conditions. The cover shall not interfere with electric motor or hydraulic pump cooling capability and shall be secured with hold-downs suitable for the operational forces. The cover shall be reinforced and of sufficient thickness to prevent panel vibrations creating noise and potential material fatigue. The HPU control panel shall utilize all weatherproof NEMA 4 control components so to be operable in all weather conditions as installed. The HPU control panel shall be equipped with a 14-gage steel fabricated hinged cover (not shown) designed to keep ice buildup from the controls. The cover shall also be designed to stay out of the operator's way when the control panel is in use.

8.3. Fastenings and Fittings. All screws, bolts, nuts, pins, studs, springs, washers, and such other miscellaneous fastenings and fittings shall be of an approved corrosion-resisting material or shall be treated in an approved manner to render them resistant to corrosion.

8.4. Corrosion-Resisting Materials. Corrosion-resisting steel, copper, brass, bronze, copper-nickel, and nickel-copper alloys are acceptable corrosion-resisting materials. However, contact between dissimilar metals should be avoided as much as practicable, except where one of the dissimilar metals is steel or in the case of wiring and connections.

8.5. Corrosion-Resisting Treatments. Hot-dip galvanizing shall be in accordance with ASTM A 123 or ASTM A 153 as applicable. Other corrosion-resisting treatments may be used if approved by the Contracting Officer.

9. OPERATION AND MAINTENANCE MANUALS.

9.1. Manual. Concurrent with the delivery of each tow haulage unit furnished, the Contractor shall provide 3 copies of a manual containing complete information in connection with the operation, lubrication, adjustment, routine and special maintenance, disassembly, repair and reassembly of the winch. The manual shall also include similar information of an OEM (Original Equipment Manufacturer) nature for the motor, hydraulic pump, control panel components, control stand components, and other HPU components. The electric motor information shall be furnished in the form of operation and maintenance, service manual and parts manuals supplied by the motor manufacturer. Control stand and control panel information shall include elementary and schematic wiring diagrams.

9.1.1. Manuals shall be made up with hard cover post-type binder, and printed on 8 1/2" x 11" high quality paper with indexed and tabbed section dividers. Large sheets shall be neatly folded and installed with posthole reinforcements allowing the sheets to unfold without opening the binder posts. Drawings incorporated in the manual and parts lists may be reduced to page size provided they are clear and easily legible; or otherwise they must be folded into the manual. Photographs and catalog cuts may be included for identification.

9.2. Parts Lists. The Contractor shall, as part of the Operation and Maintenance manual, supply a complete parts list for the pump and hydraulic components including those spare parts supplied. These lists and diagrams shall clearly show all details and enumerate the parts. All parts shall be adequately described and have proper identification marks. All equipment purchased shall have complete OEM (Original Equipment Manufacturer) information and parts manuals furnished,

10. FACTORY TEST.

10.1. General. The performance of the first tow haulage unit shall be evaluated on the basis of a factory test. This test shall be conducted using one of the winches to be furnished under this contract.

10.2. Test Set-up. The winch shall be placed in its normal horizontal operating position with a straight pull off of the level wind. A vertical suspended load is acceptable.

10.2.1. The Contractor shall submit to the Contracting Officer for approval, a description of the test set-up and test procedure proposed prior to construction of any test set up. Include dimensioned drawings and cross-sectional views of the load set-up and winch, with the location of all instruments and the point of connections shown. Each instrument shall be described in detail including manufacturer's name, type, model number certified accuracy, coefficient ratios, dynamometer, if used, and speed and load indication instruments. When necessary for clarity a sketch of the instrument or instrument arrangement shall be furnished. Also included shall be a fully detailed narrative description of each proposed method of instrumentation and the procedure to be used.

10.3. Instrumentation.

10.3.1. Speed measurements shall be made using traveled distance by tape measure over an elapsed time measured with a stopwatch.

10.3.2. Linepull shall be measured using actual test weights as approved. Use of other methods to measure linepull such as dynamometers, measured resistive load developed in a hydraulic motor, etc., shall be submitted for approval. An independently certified weight measurement instrument (i.e crane scale) accurate to (+/-)2% shall be used to measure all dead weights used.

10.3.3. Input power shall be measured by comparing measured electric motor amps to the motor manufacturer's amp/horsepower/rpm curves for representative motor.

10.3.4. The rotational speed of the hydraulic power unit (electric motor) shall be measured with revolution counters and hand held tachometers may be used. The device used shall permit the speed to be determined to the nearest +/- 25 revolutions per minute. Motor speed measurement using a photo-strobe at the motor-hydraulic pump connection is acceptable.

10.3.5 Test sound measurements shall be made using a contractor-furnished digital sound meter that complies with ANSI S1.4, meets IEC 651 Type 2 accuracy requirements, and that has current calibration certification. The sound meter range shall provide calibrated measurement of sound levels greater the specified sound level limits (for both impulse and time weighted average). Sound level measurements shall be made for all operational modes including hydraulic bypass mode. The time weighted average (TWA) sound level readings shall be taken with the unit producing 12000 line pull at the winch drum.

10.4. Test.

10.4.1. The test shall be sufficiently extensive and complete to demonstrate that the tow haulage unit operates smoothly and complies with all of the specified performance parameters.

10.4.2. The performance of the winch shall be determined by a series of test points sufficient in number to develop a constant line speed curve over the range of total loads corresponding to dead loads from 6,000 lbs. to 12,000 lbs. inclusive for the line speeds involved. Tests shall be made using the range of line speeds specified and from 120 feet per minute to 250 feet per minute. A second curve shall be developed using a suspended weight to demonstrate dynamic or controlled braking. Any additional friction losses in the test system from movement of weights shall be measured or calculated to simulate the actual haulage unit in operation under load.

10.4.3. The results of the tests shall be plotted to show the total line pull (lbs.), motor BHP (brake horsepower), input and discharge pressure at the hydraulic motor and efficiency (output power/(input power] as ordinates; all plotted against the pump discharge in gallons per minute as the abscissa. The above curves shall be plotted to a scale that will permit reading head directly to five tenths of one foot, capacity to +/- 10 gallons per minute, efficiency to one percent, and power input to +/-2 horsepower

10.5. Witness Test. When the Contractor is satisfied that the unit performs in accordance with the requirements of the specifications, the Contracting Officer shall be notified that the witness test is ready to be run, and furnish the Contracting Officer with two copies of the curves required in PARAGRAPH 10. 4.3 along with a set of sample calculations, including all constant and conversion factors. At least one week will be required to review the data, before the Contracting Officer's Representative will be available to visit the Contractor's laboratory for witnessing of the test. Should the witness test reveal that the tow haulage unit does not perform in accordance with the requirements of the specification and the guaranteed values, the Contractor shall make such changes as are required to make it acceptable before again notifying the Contracting Officer that the witness test is ready to be run. Immediately upon completion of the witness test copies of all data taken during the test shall be delivered to the Contracting Officer's Representative witnessing the test for review and examination. Final approval will be made within ten working days after the successful witness testing.

10.6. Test Report. Within 30 days of receipt of approval of the witness test, the Contractor shall furnish to the Contracting Officer, three bound copies of a report completely discussing the test set-up (as tested) and the performance test, The test report shall include a minimum the following:

(1) A statement of the purposes of the test. The name of this procurement, the contract #, and the design conditions should be given. Where guaranteed values differ from the specified values, guaranteed values should be given.

(2) A description of the test procedure used.

(3) Sample calculations (complete). (One set of calculations that are typical of the tabulated data presented in the report.)

(4) A discussion of test results.

(5) Conclusions.

(6) Photographs. color 8" by 10" with labels

(7) Copies of all recorded test data.

(8) Curves showing performance of hydraulic winch in line pull versus line speed with hydraulic oil flow, BHP at a given operating pressure.

(9) Drawings of the test set-up showing all pertinent dimensions and test loads and a detailed, dimensioned, plan view of the hydraulic winch.

11. SPARE PARTS. The Contractor shall furnish the following spare parts for each pumping unit:

(1) One (1) complete set of relays, Electro-hydraulic control valves and printed circuit boards (if used) for each control system.

(2) One (1) complete set of "O" rings and gaskets for each hydraulic pump and hydraulic motor.

(3) One (1) five gallon container of hydraulic oil that the Contractor recommends for each unit.

(4) Touch up paint shall be furnished in a nominal ½-gallon container (2 quarts) for each winch furnished.

(5) Complete set of hydraulic oil, primary and secondary filter elements.

(6) One (1) spare set of hydraulic hoses (supply & return) for each haulage unit.

(7) Two spare level wind thumbs for each winch furnished

12. REVIEW OF TECHNICAL DATA.

12.1. Technical data covering all equipment and fabricated materials to be furnished under this contract shall be submitted to the Contracting Officer for review as specified. This data shall include drawings and descriptive information in sufficient detail to show the kind, size, arrangement and operation for component materials and devices; the external connections; performance characteristics; and dimensions needed for installation and correlation with other materials and equipment. Include drawings showing essential details of any changes proposed by the Contractor and all required wiring.

12.2. No work shall be performed in connection with the fabrication or manufacture of materials and equipment, nor shall any accessory or appurtenance be purchased until the drawings and data therefore have been reviewed and accepted, except at the Contractor's own risk and responsibility.

12.3. Three copies of each drawing and necessary data shall be submitted to the Contracting Officer. Each drawing or data shall be clearly marked with the name of the project, contract number, the Contractor's name and references to applicable specification paragraphs. When catalog pages are submitted, the applicable items shall be identified.

12.4. If accepted by the Contracting Officer, each copy of the drawings will be identified as having received acceptance by being so stamped and dated. The Contractor shall make any corrections required by the Contracting Officer. If the Contractor considers any correction indicated on the drawings to constitute a change to the Contract, the Contractor shall notify the Contracting Officer prior to commencing work. Two sets of all drawings will be retained by the Contracting Officer and one set will be returned to the contractor with 20 days of receipt. The acceptance of the drawings by the Contracting Officer shall not be construed as a complete check. Acceptance of the drawings will not relieve the Contractor of the responsibility for any errors which may exist as the Contractor shall be responsible for the dimensions and design of adequate connections, details and satisfactory construction of all work.

12.5. Upon the completion of all work under this contract, the Contractor shall furnish a complete set of prints of the drawings as finally accepted. These drawings shall show all changes and revisions made up to the time equipment is completed and accepted. If shop drawings are prepared on a CAD system, an electronic version of the files shall be furnished on 3 1/2" floppy disk with the CAD software system identified. The CAD system used shall be capable of being translated to Intergraph "Microstation"

12.6. Drawings and data. Complete assembly and installation drawings together with detailed specifications and data covering materials used, parts, devices, and other accessories forming a part of the equipment furnished, shall be submitted.

13. **WARRANTY**. In addition to any other warranties required by this contract, the Contractor shall, with respect to all other warranties, expressed or implied., from subcontractors, manufacturers or suppliers for work performed and materials or components furnished under this contract:

- (1) Obtain all warranties that would be given in normal commercial practice.
- (2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer.
- (3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.

Additionally, the Contractor shall provide the Government with any warranties the Contractor, in normal commercial practice, provides to buyers or users of the goods and services provided to the Government under this contract. Written documentation of all warranties shall be provided to the Government with the Operation & Maintenance Manuals specified in Paragraph 9.