

INVITATION TO BID

State of Ohio
Department of Administrative Services
General Services Division
Office of Procurement Services

The original signed bid must be submitted to the Office of Procurement Services to receive consideration for award.		BIDDER NAME	
BID NUMBER 0B110711	OPENING DATE (1:00 p.m.) MARCH 11, 2011	STREET ADDRESS <input type="checkbox"/> Check if remit address is different and list on separate sheet	
General Services Division Office of Procurement Services 4200 Surface Road Columbus, OH 43228-1395 Attn: Bid Desk		CITY STATE ZIP	
		COUNTY	MBE/EDGE CERTIFICATE NUMBER
		TELEPHONE NO. ()	TOLL FREE NO. 1 - ()
		CONTACT PERSON	FAX NO. ()
REQ./INDEX NO. 0000015225	BID NOTICE DATE FEBRUARY 24, 2011	CONTRACTOR'S E-MAIL ADDRESS	
SELECT YOUR PREFERRED METHOD OF RECEIVING PURCHASE ORDERS AND ENTER THE E-MAIL OR FAX NUMBER INFORMATION (ONLY SELECT ONE METHOD)			
<input type="checkbox"/> E-Mail <input type="checkbox"/> Fax			
In addition to the standard terms for payment, the payment terms for state agency(ies) will be 2%, 10 Days, Net 30 Days unless otherwise stated in the following space. If no discount is offered, bidder should circle "Net 30 Days". _____%, _____ Days, Net 30 Days			
BILL TO: Ohio Department of Natural Resources Division of Parks and Recreation 2045 Morse Road Columbus, OH 43229-6693		SHIP TO: Grand Lake St. Marys State Park 834 Edgewater Drive St. Mary's Ohio 45885	
DELIVERY REQUESTED F.O.B./DEST. P.P.D. <u>240 Days ARO</u>		DELIVERY OFFERED (IF DIFFERENT) F.O.B./DEST.P.P.D. _____	
<p>THE DEPARTMENT OF ADMINISTRATIVE SERVICES, OFFICE OF PROCUREMENT SERVICES IS SOLICITING BIDS FOR:</p> <p>DREDGE, TRANSPORTABLE, CONVENTIONAL SWING, 12 INCH HYDRAULIC SUCTION</p> <p>QUANTITY AND DURATION: This Invitation to Bid, which is not a contract, is considered to be a one-time procurement offer for the product(s)/service(s) as listed herein. The successful Contractor may commence performance of the awarded contract upon receipt of an official state of Ohio Purchase Order (ADM0523/ORDE). Upon completion of the contract and upon receipt of proper invoices, payment will be provided by the ordering agency. The contract will then be considered as complete and no further purchases may be placed against the contract. With the exception of approved overrun/underrun tolerances, any deviations from the quantity listed in the awarded contract shall not be permissible nor acceptable.</p> <p>INSTRUCTIONS, TERMS AND CONDITIONS FOR BIDDING; STANDARD CONTRACT TERMS AND CONDITIONS; AND SUPPLEMENTAL CONTRACT TERMS AND CONDITIONS, Rev. 10-01-07 are a part of this Invitation to Bid. Copies may be downloaded by clicking on this link: Instructions: Terms and Conditions for Bidding, Standard Contract Terms and Conditions, and Supplemental Contract Terms and Conditions. All prior versions of Instructions to Bidders, Contract Terms and Conditions are null and void.</p> <p>Any questions or clarifications regarding this Invitation to Bid should be directed to the Office of Procurement Services through the Internet at www.ohio.gov/procure. All questions should be submitted a minimum of seven (7) working days prior to the bid opening date.</p>			
PRINTED/TYPED SIGNATURE	AUTHORIZED SIGNATURE (ORIGINAL SIGNATURE ONLY) (Please sign in blue ink)		DATE

The original signed bid must be submitted to the Office of Procurement Services by 1:00 o'clock p.m. on the above listed opening date to receive consideration for award. It is requested that the bidder not sign their bid in black ink. Bidder certifies, by signature affixed to this bid, that the information provided by it in its bid including the certified statements, is accurate and complete. Bidder declares to have read and understood and agrees to be bound by all of the instructions, terms, conditions and specifications of this Invitation to Bid and agrees to fulfill the requirements of any awarded contract at the prices bid.

REQUIRED CERTIFICATION FOR BIDDING

Those bidders claiming preference for Domestic Source End Products and/or the Ohio preference, pursuant to Revised Code Sections 125.09 and 125.11 and Administrative Code Section 123:5-1-06 must complete the following information. Bidders who qualify as an "Ohio" bidder (offer an Ohio product or who have significant Ohio economic presence) or who qualify as a Border State bidder are eligible to receive a five percent (5%) preference over non-Ohio/Border state bidders. The state reserves the right to clarify any information during the evaluation process. **BIDDERS MUST COMPLETE THIS CERTIFICATION TO RECEIVE THE PREFERENCE.**

A. DOMESTIC PREFERENCE (BUY AMERICA): [Not applicable to "Excepted Products"]

- Where is each product/services being offered mined, raised, grown, produced or manufactured?
 United States: _____(State) Canada Mexico (Go to B-1)
 Other: (Specify Country)_____ (Go to A-2)
- End product is manufactured outside the United States and at least 50% of the cost of its components are produced, mined, raised, grown or manufactured within the United States. The cost of components may include transportation costs to the place of manufacture and, in the case of components of foreign origin, duty whether or not a duty free entry certificate is issued.
 Yes (Go to Section B-1) No (Go to Section A-3)
- The Bidder hereby certifies that each end product, except the products listed below, is a domestic source end product as defined in the Buy America Act and that components of unknown origin have been considered to have been mined, produced, grown or manufactured outside the United States.
_____(Item) _____(Country of Origin)
_____(Item) _____(Country of Origin)

A domestic end source product is deemed to be excessively priced if it exceeds the cost of the foreign product by more than 6%. Pursuant to FAR, Part 25, the state of Ohio does not acquire supplies or services that cannot be imported lawfully into the United States. The contractor, their subcontractor(s) and any agent of the contractor or subcontractor must not acquire any supplies or services originating from sources within, or that were located in or transported from or through Cuba, Iran, Iraq, Libya, North Korea, Sudan Territory of Afghanistan controlled by the Taliban, or Serbia (excluding the territory of Kosovo).

B. OHIO PREFERENCE (BUY OHIO):

- The products/services being offered are raised, grown, produced, mined or manufactured in Ohio.
 Yes (Go to C) No (Go to B-2)
- Bidder has significant economic presence within the state of Ohio. Yes (Answer a, b, c, d below) No (Go to B-3)
 - Bidder has paid the required taxes due the state of Ohio Yes No
 - Bidder is registered with the Ohio Secretary of State
 Yes (Charter/Registration No.: _____) No
Questions regarding registration should be directed to (614) 466-3910 or visit their web site at:
<http://www.sos.state.oh.us/>
 - Bidder has ten or more employees based in Ohio or border state. Yes No (Go to B-2d)
 - Bidder has seventy-five percent or more employees based in Ohio or border state. Yes No (Go to B-3)
- Border state bidder:
 Yes (Specify which state then go to B-2c): KY MI NY PA IN No (Go to B-4)
- Border state bidder: mined products mined in respective border state Yes No Not Applicable



C. E.D.G.E. DESIGNATION

Bidder is certified E.D.G.E. business Yes No

For information on E.D.G.E. designation, please visit the DAS Equal Opportunity Division website at:
<http://das.ohio.gov/Eod/Edge/Index.htm>

D. DECLARATION REGARDING MATERIAL ASSISTANCE/NON-ASSISTANCE TO A TERRORIST ORGANIZATION (DMA)

The Bidder being awarded this Contract must:

- review the Terrorist Exclusion List at http://www.publicsafety.ohio.gov/links/terrorist_exclusion_list.pdf
- complete the Declaration Regarding Material Assistance/Non-Assistance to a Terrorist Organization (DMA) form <http://www.publicsafety.ohio.gov/links/HLS0038.pdf> and submit this with your bid response.

Failure to complete the Declaration Regarding Material Assistance/Non-Assistance to a Terrorist Organization (DMA) form may result in the bidder being deemed not responsive and/or may invalidate any Contract award. If not submitted with the bid response, the bidder will have seven (7) calendar days, after notification, to submit the form.

PRICE SCHEDULE:

Bidders shall not insert a unit cost more than 3 digits after the decimal point. Digit(s) beyond 3, after the decimal point, shall be dropped by the Office of Procurement Services and not used in evaluation and any subsequent order.

ITEM NO.	QTY.	UNIT	DESCRIPTION	UNIT PRICE	EXTENDED AMOUNT
1.	1	EA	DREDGE, TRANSPORTABLE, CONVENTIONAL SWING, 12" INCH HYDRAULIC SUCTION	\$	\$

SCOPE: The dredge will be used to excavate silt, muck, sand, peat, clay, gravel and mixtures thereof from lake and river bottoms. The dredge is conventional swing model in design.

MANUFACTURER IDENTIFICATIONS OF COMMODITY:

All bidders shall indicate in the spaces below the manufacturer's name, model, brand or style number, warranty, for all commodities they bid. Failure to comply with this stipulation may result in the offer being rejected.

Manufacturer: _____

Model: _____

Brand: _____

Style: _____

Warranty: _____

Product offered is the latest style (model) being marketed by the manufacturer: ____Yes ____No

WARRANTY:

Manufacturer shall provide a minimum of one year parts and labor warranty, from date of delivery and acceptances, excluding normal maintenance wear parts. Manufacturer's warranty information shall be provided with bid submittal. If not provided as part of the bid response, the Bidder must provide said warranty information within seven (7) calendar days after request/notification by the Office of State Purchasing to do so. Failure of the bidder to furnish manufacturer's warranty information either as part of their bid response or within the time specified herein may deem the bidder not responsive.

AMENDMENTS TO CONTRACT TERMS AND CONDITIONS: The following Amendments to the Contract Terms and Conditions do hereby become a part hereof. In the event that an amendment conflicts with the Contract Terms and Conditions, the Amendment will prevail.

DELIVERY AND ACCEPTANCE: Supplies will be delivered to the participating agency within 240 days after receipt of order and, in accordance with paragraphs S-8, S-9, and S-10 of the SUPPLEMENTAL CONTRACT TERMS AND CONDITIONS. The delivery location will be noted on the purchase order issued by the participating agency. Acceptance (transfer of title) will occur upon the inspection and written confirmation by the ordering agency that the supplies delivered conform to the requirements set forth in the Contract. Unless otherwise provided in the Contract, acceptance shall be conclusive except as regards to latent defects, fraud, or such gross mistakes as amount to fraud.

DESCRIPTIVE LITERATURE: The Bidder may be required to submit descriptive literature of the supplies or services being offered. If requested, the literature will be used in the evaluation process to determine the lowest responsive and responsible bidder. If not provided as part of the bid response, the Bidder must provide said literature within seven (7) calendar days after request/notification by the Office of State Purchasing to do so. Any references, that may appear in the descriptive literature, that may alter the terms and conditions and specifications of the bid (i.e. F.O.B. Shipping Point or Prices Subject to Change), will not be part of any contract and will be disregarded by the state of Ohio. Failure of the bidder to furnish descriptive literature either as part of their bid response or within the time specified herein will deem the bidder not responsive.

DISCLOSURE OF SUBCONTRACTORS / JOINT VENTURES (See Standard Contract Terms and Conditions, Section (roman numeral) V. General Provisions:, Paragraph Q.):

List names of subcontractors who will be performing work under the Contract.

_____	_____
_____	_____
_____	_____

By the signature affixed to Page 1 of this Bid, Bidder hereby certifies that the above information is true and accurate. The Bidder agrees that no changes will be made to this list of subcontractors or locations where work will be performed or data will be stored without prior written approval of DAS. Any attempt by the Bidder/Contractor to change or otherwise alter subcontractors or locations where work will be performed or locations where data will be stored, without prior written approval of DAS, will be deemed as a default. If a default should occur, DAS will seek all legal remedies as set forth in the Terms and Conditions which may include IMMEDIATE cancellation of the Contract. **FAILURE TO COMPLETE THIS PAGE MAY DEEM YOUR BID NOT RESPONSIVE.**

EVALUATION: Bids will be evaluated in accordance with Article I-17 of the "Instructions to Bidders". In addition, the state will award to the bidder offering the best overall solution/price to the State.

CONTRACT AWARD: The contract will be awarded to the lowest responsive and responsible bidder.

NOTICE ON THE USE OF SOCIAL SECURITY NUMBERS AS FEDERAL TAX IDENTIFICATION NUMBERS: The Department of Administrative Services (Department) requires vendors and contractors wishing to do business with the State to provide their Federal Taxpayer Identification Number to the Department. The Department does this so that it can perform statutorily required "responsibility" analyses on those vendors and contractors doing business with the State and, under limited circumstances, for tax reporting purposes. If you are a vendor or contractor using your Social Security Number as your Federal Taxpayer Identification Number, please be aware that the information you submit is a public record, and the Department may be compelled by Ohio law to release Federal Taxpayer Identification Numbers as a public record. If you do not want to have your Social Security Number potentially disclosed as a Federal Taxpayer Identification Number, the Department encourages you to use a separate Employer Identification Number (EIN) obtained from the United States Internal Revenue Service to serve as your Federal Taxpayer Identification Number.

DATA SHEET: Shown below are the specification requirements for equipment that the State desires to purchase. These specifications shall only be considered as necessary to establish functional requirements. Proprietary design, exact dimensions, capacities, or restrictive features shall not preclude acceptance of other recognized alternates meeting comparable performance requirements as determined by the administrator of State Purchasing. Bidder signifies compliance or non-compliance with specifications by checking yes or no on the left side of the form and returning it with the State Purchasing copy of the bid. List all deviations from specifications. Failure to comply may void your bid.

SPECIFICATIONS FOR DREDGE

YES NO BASIC DESCRIPTION

- ___ ___ 1. Overall length – 66’ 9” minimum, 67’feet, maximum.
- ___ ___ 2. Overall width (including side tanks) – 23’ 9” feet, minimum, 24” maximum.
- ___ ___ 3. Hull depth 4’ minimum.
- ___ ___ 4. Mean draft (loaded with fuel) 24” maximum.
- ___ ___ 5. Side hull sections (2) 44’ x 7’-11” x 4’ ea.
- ___ ___ 6. Center section (1) 31’-6” x 7’-11” x 4’.
- ___ ___ 7. Overall dimensions: 44’ x 23’-9” x 4’.
- ___ ___ 8. All sections must have watertight manhole access.
- ___ ___ 9. Built in ballast tanks.
- ___ ___ 10. Fuel tanks 1000 gallon total capacity minimum.
- ___ ___ 11. Two (2) deck cleats per tank.
- ___ ___ 12. Four (4) lifting lugs per side hull section located to allow for balanced lift of sections.
- ___ ___ 13. Four (4) lifting lugs on center hull section located to allow for balanced lift of hull.

HOISTING

- ___ ___ 14. Spuds (2) 37’ each, square, 12” x 12”.
- ___ ___ 15. Spud winch system: power up/power down configuration.
- ___ ___ 16. Line Pull” 7,646 lb.
- ___ ___ 17. Wire rope size: ½”.
- ___ ___ 18. Swing Winches: (2) .
- ___ ___ 19. Line Pull: 7,646 lb.
- ___ ___ 20. Line speed: 63.6 ft/min.
- ___ ___ 21. Wire size: ½”.
- ___ ___ 22. Drum capacity: 437’.
- ___ ___ 23. Ladder Lift: by means of hydraulic cylinder.

OPERATING CONDITIONS.

- ___ ___ 24. Digging depth: Minimum 3’.
- ___ ___ 25. Digging depth: Maximum 30’.

CUTTER SYSTEM

- ___ ___ 26. Cutting force: 5,180 lb minimum.
- ___ ___ 27. Operating torque 94,538 in lb.
- ___ ___ 28. Cutting force per linear inch: 258 lb/inch.
- ___ ___ 29. Cutter diameter: 31 ½” ID.
- ___ ___ 30. Shaft diameter: 3”.
- ___ ___ 31. Cutter rating: 60HP.
- ___ ___ 32. Cutter speed variable 0-40 RPM.

DREDGE PUMP

- ___ ___ 33. Suction pipe: 12” I.D. w/3/8” wall thickness.
- ___ ___ 34. Discharge pipe: 12” I.D. w/3/8” wall thickness.
- ___ ___ 35. Pump case: hard iron.
- ___ ___ 36. Approximate particle clearance – 6 inch minimum
- ___ ___ 37. Impeller diameter 32” thread mounted 3 blade (bolt in thread insert not acceptable).
- ___ ___ 38. Dual lip, grease purged shaft seals.
- ___ ___ 39. Packed stuffing box with replaceable stainless steel shaft sleeve.
- ___ ___ 40. In-line marine transmission for single lever throttle/clutch operation. Pump must be engaged and disengaged from lever room.
- ___ ___ 41. Nominal head: 230 feet H2O.

- | YES | NO | DREDGE PUMP (Cont'd) |
|-----|-----|--|
| ___ | ___ | 42. Nominal flow: 4,250 GPM. |
| ___ | ___ | 43. Dredge pump must be designed and built to insure balanced overall dredge design with commercially available, not proprietary, spare parts. |
| ___ | ___ | 44. Pump as installed must be self-priming with shaft centerline at or slightly below waterline. Any prime assist valves must be solenoid actuated and operable from lever room. |
| ___ | ___ | 45. Pump must be direct drive through gear reduction, belt drive not acceptable. |
| ___ | ___ | 46. Flanged suction cleanout with gasketed cover provided in pump. Lifting mechanism directly about pump clean out cover must be provided. |
| ___ | ___ | 47. Pump must be completely serviceable without removing from dredge. |
| ___ | ___ | 48. Removable access cover panel provided in roof above pump. (Engine/pump room roof panel should be manufactured in two equal pieces which will allow access). |

DREDGE PUMP REDUCTION

- | | | |
|-----|-----|---|
| ___ | ___ | 49. Inline direct drive, marine gear type. Reduction provided with torsional coupling and elastomer coupling. |
|-----|-----|---|

DIESEL ENGINE

- | | | |
|-----|-----|---|
| ___ | ___ | 50. Engine model: Caterpillar C15 ACERT or equivalent. |
| ___ | ___ | 51. Rated Horsepower: 540 HP minimum. |
| ___ | ___ | 52. Must include all recommended manufacturer system i.e. fuel, air. Coolant filters, 60amp alternator, gauges, etc. Must meet all EPA emissions guidelines for marine engines. |
| ___ | ___ | 53. Must be biodiesel compatible. |

CONTROL SYSTEM

- | | | |
|-----|-----|--|
| ___ | ___ | 54. Expandable programmable logic center controller (PLC) to facilitate dredge operation, alarms, logging data and other custom settings. On board diagnostics and set up screens to provide quick trouble shooting and other custom operating parameters. |
|-----|-----|--|

HYDRAULIC SYSTEM

- | | | |
|-----|-----|---|
| ___ | ___ | 55. Independent electro proportional circuits allowing simultaneous cutter, swing and ladder operation. |
| ___ | ___ | 56. All circuits protected by suction strainer, return filters and relief valves. |
| ___ | ___ | 57. System to include all pumps, hose, fittings, valves, etc. |
| ___ | ___ | 58. Must be compatible with and supplied with biodegradable hydraulic oil. |
| ___ | ___ | 59. Electric over hydraulic control levers to provide quiet, low heat operation. |
| ___ | ___ | 60. Hydraulic lines within lever room prohibited. |

ELECTRICAL

- | | | |
|-----|-----|---|
| ___ | ___ | 61. Minimum 10KVA generated electric AC power capable of providing 15 amps continuous output. |
| ___ | ___ | 62. 24 VDC for starting, lighting, and controls. |
| ___ | ___ | 63. 12 VDC for convenience and user furnished radios and equipment. |
| ___ | ___ | 64. All circuits fused for protection. |
| ___ | ___ | 65. Two (2) 1000 cold cranking amp batteries. |
| ___ | ___ | 66. Two (2) floodlights forward and two floodlights aft for night operations minimum. |
| ___ | ___ | 67. One dome light mounted in lever room. |
| ___ | ___ | 68. Four lights in pump/engine room minimum. |

YES NO SERVICE WATER SYSTEM

- ___ ___ 69. Centrifugal pump, self-priming, belt driven with anti-friction bearings, and cast iron construction.
- ___ ___ 70. Pump must be of sufficient design and size as to provide a minimum of 15 lbs. psi greater than maximum dredge pump discharge pressure at all engine speeds.
- ___ ___ 71. Sea chest with cleanable strainer and shut off valve to provide for complete draining and winterization, built into hull.
- ___ ___ 72. Water drain valve for service water pressure gauge line, discharge pressure gauge line and service water pump for winterization.
- ___ ___ 73. Deck wash valve-1/2" provided for daily cleaning.

YES NO CONTROL ROOM

- ___ ___ 74. Must accommodate a minimum of 2 operators and be weather tight, climate controlled (air conditioned and heated) prefer hydraulic driven system versus electric.
- ___ ___ 75. Tinted, safety glass windows all around with two lockable doors, one port and one starboard.
- ___ ___ 76. Operator command chair with adjustable position and operating button controls. Fold down arm supports.
- ___ ___ 77. Control panel to include all industry standard gauges for dredge pump and systems.
- ___ ___ 78. Dredge pump vacuum gauge.
- ___ ___ 79. Dredge pump discharge gauge.
- ___ ___ 80. Cutter hydraulic pressure gauge.
- ___ ___ 81. Service water pressure gauge.
- ___ ___ 82. Dredge pump engine tachometer.
- ___ ___ 83. Dredge pump engine oil pressure gauge with alarm light.
- ___ ___ 84. Dredge pump engine water temperature gauge with alarm light.
- ___ ___ 85. Dredge pump engine throttle/clutch control.
- ___ ___ 86. Cutter forward-reverse-speed control.
- ___ ___ 87. Bilge pump with alarm control.
- ___ ___ 88. Hydraulic and day tank level light.

SAFETY EQUIPMENT

- ___ ___ 89. Deck edge safety rail in accordance with all applicable OSHA regulations.
- ___ ___ 90. Life vests, three minimum.
- ___ ___ 91. Life rings (two with floating lights).
- ___ ___ 92. Fire extinguishers – two minimum, one mounted in engine/pump room, one mounted in lever room.
- ___ ___ 93. Automatic bilge pump system (24 V. D. C.) for pump room.

ADDITIONAL EQUIPMENT

- ___ ___ 94. One stern jib crane for discharge hose.
- ___ ___ 95. One tool kit including impeller shaft wrench and other specialty tools necessary for routine maintenance.
- ___ ___ 96. One 12" I. D. rubber discharge hose flanged to connect to 12" I. D. plastic discharge pipe X 12' length.
- ___ ___ 97. Safety guards and decals as required with appropriate warnings and colors in accordance with NSC recommendations.
- ___ ___ 98. Identification plated on all instrumentation and controls.

PAINTING

- ___ ___ 99. All wetted surfaces shall be sandblasted to a commercial grade SSPC SP6 and coated with "coal tar epoxy" (or equivalent) at 16 dry mils thick.
- ___ ___ 100. All other exposed surfaces shall be sandblasted to a commercial grade SSPC SP6 and coated with two coats of epoxy primer/paint @ 5 dry mils thick each coat and a third color coat of polyurethane (or equivalent) applied at 2 dry mils thick. Colors shall be manufactures standard and commercially available.

- | YES | NO | MISCELLANEOUS |
|-----|-----|--|
| ___ | ___ | 101. All steel members 8' or less in length, including angles and channels are cut from a single length of new steel with no intermediate welded joints. |
| ___ | ___ | 102. All hydraulic cylinders are tie rod types. |
| ___ | ___ | 103. Engine/pump room must be enclosed with two "hatch type" lockable doors minimum (one port side and one starboard side) and include ventilation panels and two ventilation fans minimum. |
| ___ | ___ | 104. Sufficient paint of all colors must be provided to touch up any surfaces scratched during shipment and final assembly. |
| ___ | ___ | 105. All welding and welding operators shall be qualified prior to performance of any work according to the standards of the American society of Mechanical Engineers (ASME). |
| ___ | ___ | 106. Finished welds shall be of uniform cross section and reasonably smooth. Welds shall be free of cracks, pits , craters, voids, undercutting, overlapping, excessive porosity, pinholes and slag inclusions. All defective welds shall be removed and repaired with sound weld metal. Poorly shaped welds shall be removed and replaced. |
| ___ | ___ | 107. Warranty shall be a minimum of one year, parts, labor and shipping. |
| ___ | ___ | 108. All components, parts and materials used in the manufacturer shall be new and free from defects and imperfections. |
| ___ | ___ | 109. The bidder shall submit with his bid, the following data and/or drawings in sufficient detail to demonstrate that the dredge to be furnished will conform to the provisions, requirements and intent of this bid. General arrangement drawing(s) and data showing overall dimensions of the dredge, digging depth, location of machinery, draft, principle hull dimensions (including center hull section and side tanks) and details describing the method of securing the hull sections as an assembly are to be shown. |
| ___ | ___ | 110. Upon completion of hull and side tanks and prior to assembly, the tanks shall be individually tested for water tightness to insure against leakage. |
| ___ | ___ | 111. The dredge shall be operated / tested under full load conditions and not "no" load conditions. |
| ___ | ___ | 112. Inspection and approval prior to shipment by one representative from the State of Ohio at awardees expense. |
| ___ | ___ | 113. The manufacturer shall furnish the following data:
Three prints, suitable for reproduction, of the final correct general arrangement or assembly drawings with detailed data showing all changes and revisions.
Three prints, suitable for reproduction, of hydraulic schematic and electrical schematic showing components, plumbing and wiring details respectively.
Three prints of marking and match marking diagrams
Three sets of parts lists (manuals or drawings) identifying parts and components of each system. These listings shall be comprehensive enough to enable the customer to order, by code or number any part or component installed on the dredge.
Three sets of operation manuals listing procedures, limitations and operating instructions for all systems incorporated in the dredge. |