

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH, N. C.

PROPOSAL FORM

NAME OF BIDDER

ADDRESS OF BIDDER

DATE AND TIME OF OPENING BIDS 2:00 PM DECEMBER 20, 2005

PROJECT NO. **16.71001**

CONTRACT NO. C201519

VESSEL CLASS: BARGE

VESSEL NAME: UNKNOWN

DESCRIPTION: CONSTRUCTION of One (1) 136'-6" X 40' X 9' CRANE BARGE

W/ OWNER FURNISHED 60 TON CRAWLER CRANE

TYPE OF WORK : NEW CONSTRUCTION

Bids Will Be Received As Shown:

NEW CONSTRUCTION: X

REPAIR: _____

5% BID BOND REQUIRED, SECURED BY EITHER
A CORPORATE SURETY OR CERTIFIED CHECK.

Proposal for the construction of Project No. 16.71001

in Carteret County, North Carolina Date November 22, 2005

Department of Transportation
Raleigh, North Carolina

The Bidder has carefully examined the specifications and plans of the proposed work to be known as Project No. 16.71001, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract by August 1, 2006 and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete State Highway Project No. 16.71001 for Carteret County, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications show the details covering this project, and hereby become a part of this contract.

If the proposal is accepted and the award is made, the contract is valid only when signed either by the Contract Officer or such other person as may be designated by the Secretary to sign for the Department of Transportation. The conditions and provisions herein cannot be changed except over the signature of the said Contract Officer.

Accompanying this bid is a bid bond secured by a corporate surety, or certified check payable to the order of the Department of Transportation, for five percent of the total bid price, which deposit is to be forfeited as liquidated damages in case this bid is accepted and the Bidder shall fail to provide the required payment and performance bonds with the Department of Transportation, under the condition of this proposal, within 14 calendar days after the written notice of award is received by him, as provided in the Standard Specifications; otherwise said deposit will be returned to the Bidder.

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** Consists of itemized proposal sheets which are numbered by the sheet.

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136'-6" x 40'-0" x 9'-0" CRANE BARGE

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June 17, 1982

16.71001

SPECIAL PROVISIONS

EXECUTIONS OF SIGNATURE SHEET

The Bidder's attention is directed to the various sheets in the proposal form which are to be signed by the Bidder. A list of these sheets is shown below. The signature sheets are located behind the item sheets in the proposal form. The bid bond is inserted in the proposal form.

1. Applicable Signature Sheets: 1, 2, 3, 4, or 5 (Bid)
2. Bid Bond (Proposal Insert)

16.71001

PROJECT SPECIAL PROVISIONS

SCHEDULE OF ESTIMATED COMPLETION PROGRESS

The Contractor's attention is directed to the Standard Special Provision entitled "Availability of Funds - Termination of Contracts" included elsewhere in this proposal form. The Department of Transportation's schedule of estimated completion progress for the project as required by that Standard Special Provision is as follows:

FISCAL YEAR

PROGRESS (DOLLAR VALUE)

2006 7-1-05 – 6-30-06

100% of Total Amount Bid

The Contractor shall also furnish his own progress schedule in accordance with Article 1.7-2 of the Standard Specifications. Any acceleration of the progress as shown by the Contractor's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

PROJECT SPECIAL PROVISION

DOMESTIC STEEL AND IRON PRODUCTS

The requirements of this provision do NOT apply to certain ferry boat equipment and machinery items. These items include marine diesel engines, electrical switchboards and switchgear, electric motors, pumps, ventilation fans, boilers, electrical controls and electronic equipment. The use of these specific equipment and machinery items, which have been manufactured outside the United States, is permitted for crane barge with living quarters construction.

Except as provided in the above paragraph, all steel and iron products which are permanently incorporated into this project shall be produced in the United States. Minimal amounts of foreign steel and iron products may be used provided the combined project cost of the bid items involved does not exceed one-tenth of one percent (0.1 percent) of the total amount bid for the entire project or \$2,500.00, whichever is greater. This minimal amount of foreign produced steel and iron products permitted for use by this Special Provision is not applicable to fasteners. Domestically produced fasteners are required for this project.

All steel and iron products furnished as “domestic products” shall be melted, cast, formed, shaped, drawn, extruded, forged, fabricated, produced or otherwise processed and manufactured in the United States. Raw material used in manufacturing “domestic” steel and iron products may be imported; however, all manufacturing processes to produce the products, including coatings, must occur in the United States.

Before each steel or iron product is incorporated into this project or included for partial payment on a monthly estimate, the contractor shall furnish the Resident Engineer a notarized certification certifying that the product conforms to above requirements of this Special Provision. The Resident Engineer will forward a copy of each certification to Materials and Test Unit, if applicable.

Each purchase order issued by the contractor or subcontractor for steel and iron products to be permanently incorporated into this project shall contain in bold print a statement advising the supplier that all manufacturing processes to produce the steel or iron shall have occurred in the United States. The Contractor and all affected subcontractors shall maintain a separate file for steel and iron products permanently incorporated into this project so that verification of the Contractor’s efforts to purchase “domestic” steel and iron products can be readily verified by an authorized representative of the Department or the Federal Highway Administration.

MINORITY AND WOMEN BUSINESSES:

6-15-93_R

POLICY

It is the policy of the North Carolina Department of Transportation that Minority and Women Businesses shall have the maximum opportunity to participate in the performance of contracts financed by Non-Federal funds.

The Contractor is also encouraged to give every opportunity to allow MBE/WBE participation in Supplemental Agreements.

OBLIGATION

The Contractor and any subsequent Subcontractor shall ensure that Minority and Women Businesses have the maximum opportunity to participate in the performance of the work included in this contract. The Contractor shall take all necessary and reasonable steps to ensure that minority and women businesses have the maximum opportunity to compete for and perform a portion of the work included in this contract. Failure on the part of the Contractor to carry out the requirements set forth herein shall constitute a breach of contract and after proper notification, may result in award disqualification, termination of the contract, disqualification from bidding, or other appropriate remedy.

GOALS

Due to the nature of work in this contract, specific goals for participation by minority and women businesses are not established.

REPORTING MINORITY BUSINESS ENTERPRISE OR WOMEN BUSINESS ENTERPRISE PARTICIPATION

When payments are made to Minority Business Enterprise firms or Women Business Enterprise firms, including material suppliers, contractors at all levels (prime, subcontractor, or second tier subcontractor) shall provide the Engineer with an accounting of said payments. This accounting shall be furnished the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in (1) withholding of money due in the next partial pay estimate; or (2) removal of an approved Contractor from the prequalified bidders list or the removal of other entities from the approved subcontractors list. The accounting shall list for each payment made to a MB/WB Enterprise firm the following:

- DOT Project Number
- Payee Contractor Name
- Receiving Contractor or Material Supplier
- MB/WB Certification Basis, e.g., Woman Owned, Native American, African American, etc.
- Amount of Payment
- Date of Payment

A responsible fiscal officer of the payee contractor, subcontractor, or second tier subcontractor who can attest to the date and amounts of the payments shall certify that the accounting is correct. A copy of an acceptable report may be obtained from the Engineer.

SP1G70

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
RALEIGH, NORTH CAROLINA
SPECIFICATIONS FOR CONSTRUCTION
OF
ONE (1) 136'-6"x40'-0"x9'-0" CRANE BARGE
W/ AN OWNER FURNISHED 60 TON AMERICAN HB-60 CRAWLER CRANE
DECEMBER 20, 2005

PREPARED BY:

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
FERRY DIVISION
ROOM 120, MARITIME BLDG.
113 ARENDELL STREET
MOREHEAD CITY, NORTH CAROLINA
MARINE ENGINEERING DEPT.

PROJECT NO. WBS 16.71001

136'-6" x 40'-0" x 9'-0" CRANE BARGE

CONSTRUCTION SPECIFICATIONS

PROJECT 16.71001

BASIC HULL PARTICULARS:

Length (L.O.A.)	136'-6"
Breadth (Molded).	40'-0"
Breadth (Max. at MN DK)	40'-0"
Main Deck (Camber).	0'-0"
Depth (Amidships)	9'-0"
Draft (Design).	3'-0"
Engine (Main Propulsion).	N/A
Propellers	N/A
Gross Tonnage	575 US (approximate)

BRIEF DESCRIPTION

This vessel is a steel hull, single rake deck barge. All spaces below main deck are voids with the exception of the engine room, sanitation machinery, ballast, potable water and fuel tanks. The Main Deck will be flat. The barge is designed for a 60 Ton crawler crane located on the main deck with quarters for (6) persons aft in a single level superstructure. The vessel **will not be** inspected by USCG, but will be used for maintenance service of the Ferry Division facilities.

The crane will be furnished and installed by the owner at time of delivery of barge.

CLASS IS FOR INLAND SERVICE ONLY

SECTION I

CONSTRUCTION SPECIFICATIONS

PROJECT 16.71001

1.0 GENERAL REQUIREMENTS

1.1 DEFINITIONS

Wherever the words defined in this paragraph or pronouns used in their stead occur in these specifications, they shall have the meanings here given.

(a) The term "Owner" means the North Carolina Department of Transportation, and shall include its authorized Representatives and Inspectors.

(b) The term "Contractor" means the person, firm or corporation named as such in the contract and includes the plural number and the feminine gender when such are named in the contract as the contractor.

(c) The term "Subcontractor" means an individual, partnership, firm, joint venture, or Corporation to whom the Contractor, with written consent of the Engineer, sublets any part of the contract.

(d) The word "Vendor" shall be taken to mean suppliers and/or manufacturers of materials and equipment purchased by the Contractor for use in the work covered by these specifications.

(e) Coast Guard Inspector means Officer in Charge of Marine Inspection having cognizance over the certification of the vessel, where applicable, and includes Inspection Officers under his command.

(f) The words "approval of the Owners" or "approved" shall mean an approval in writing signed by the owners.

(g) The words "furnish", "provide" and "install" shall be taken to mean that the Contractor shall provide and install the specified material or equipment with necessary fittings, foundations, piping, electrical wiring and fixtures, etc., and make necessary hook-up and connections even though one of the words only is used, unless it is specifically stated otherwise.

(h) The term "work" of the Contractor or subcontractor includes labor or materials or both unless specifically stated otherwise herein.

(i) The words "renew" or "replace" shall be taken to mean that the existing material or item referred to shall be removed and disposed of as directed, and other material or items installed in place of the same as in subparagraph (h) above.

(j) The word "reinstall" shall mean that existing material shall be reused in either its original or a new location, and completely installed as in subparagraph (h) above.

(k) The term "Notice" as used herein shall include all written notices, demands, instructions, claims, approvals, and disapprovals, required to obtain compliance with Contract requirements. Any written notice by either party to the Contract shall be considered sufficiently given if delivered to the other party, agent, representative or officer in person. The person to whom the notice is delivered shall sign the duplicate copy and return the same to the other party immediately after receipt.

(l) The words "or equal" shall be taken to mean of equal quality, size capacity, general configuration and suitability for the use intended, as the item or items set out. Where reference is made to "trade names" or "catalogs", the reference is descriptive and restrictive unless stated otherwise by adding "or equal".

(m) The words "best Marine quality" or "first-class material" shall be taken to mean the top grade product of an approved marine manufacturer.

(n) The words "first class workmanship" shall be taken to mean the level of quality that would be done by a capable marine mechanic experienced in construction and outfitting of passenger vessels, using proper tools in good condition and in accordance with normally accepted good shipbuilding practice.

(o) All "tons" used herein are 2,240 pounds each

(p) The term "Act of God" as used herein is defined as an unusual and extraordinary manifestation of the forces of nature, that could not under normal conditions have been anticipated or expected. It includes a tornado, a hurricane, lightning, and fires caused by lightning, but it does not include strikes, or other work stoppages, rain not accompanied by a hurricane, fire not caused by lightning or hot or cold temperatures.

(q) The "Chief Engineer" means Chief Engineer of Operations Division of Highways, North Carolina Dept. of Transportation.

(r) "Division of Highways" means the division of the Department of Transportation which, under the direction of the Secretary of Transportation, carries out state highway planning, construction, and maintenance functions assigned to the Department of Transportation.

(s) The "Engineer" means the Chief Engineer of Operations, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representatives.

(t) The "Inspector" means the authorized representatives of the engineer assigned to make a detailed inspection of any or all portions of the work and materials.

(u) "Department" or "Department of Transportation" means a principal department of the executive branch, which performs the function of planning, construction, and maintenance of an integrated statewide transportation system.

1.2 BIDDING REQUIREMENTS AND CONDITIONS

1.2-1 INVITATION TO BID

After the advertisement has been made, an invitation to bid will be mailed to known qualified Contractors informing them that bids will be received for the construction of specific project. Such invitation will indicate the project number, length, locations, and general descriptions; a general summary of the items and approximate quantities of work to be performed; and the time and place for the public opening and reading of bids received. Information concerning the cost of and the availability of plans and proposal forms will also be indicated in the invitation to bid.

1.2-2 PREQUALIFYING TO BID

Prospective Bidders shall prequalify with the Department. The requirements for prequalification will be furnished each prospective Bidder by the Contractual Services Unit, Raleigh, NC (919-733-7174). All required statements and documents shall be filed with the Contractual Services Unit by the prospective Bidder at least two (2) weeks prior to the date of

opening of bids. A bid will not be opened unless all prequalification requirements have been met by the bidder and have been found to be acceptable by the Contractual Services Unit.

1.2-3 CONTENTS OF PROPOSAL FORMS

A proposal form will be furnished by the Department upon request. Each proposal form will be marked on the front cover by the Department with the name of the firm or individual to whom it is being furnished. It will set forth the date and time for the opening of bids. The form will include any requirements which vary from or are not contained in the plans. It will also include a bid sheet on which the Contractor shall place his lump sum bid for the project. All papers bound with the proposal form are necessary parts thereof and shall not be detached, taken apart, or altered.

The plans, specifications and other documents designated in the proposal form shall be considered a part of the proposal form whether attached or not. The prospective Bidder will be required to pay the Department of Transportation the sum stated in the invitation to bid for each copy of the proposal form and each set of plans requested.

1.2-4 EXAMINATION OF PLANS AND SPECIFICATIONS

The Bidder shall carefully examine the proposal form, plans and specifications, before submitting a bid. It is mutually agreed that submission of a bid shall be considered prima-facie evidence that the Bidder has made such examinations and is reasonably satisfied as to the conditions to be encountered in performing the work, and as to the requirements of the proposal form and contract.

1.2-5 PREPARATION AND SUBMISSION OF BIDS

All bids shall be prepared and submitted in accordance with the following listed requirements:

1. THE PROPOSAL FORM FURNISHED BY THE DEPARTMENT SHALL BE USED AND SHALL NOT BE TAKEN APART OR ALTERED. The bid shall be submitted on the same proposal form which has been furnished to Bidder by the Department, as identified by the Bidder's name marked on the front cover by the Department.

2. All entries including signatures shall be written in ink.

3. The Bidder shall submit a unit or lump sum price for every item in the proposal form other than items which are authorized alternates to those items for which a bid price has been submitted.

4. The total amount bid shall be written in figures in the proper place in the proposal form.

5. Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the bidder shall initial the change in ink.

6. The bid shall be properly executed. In order to constitute proper execution, the bid shall be executed in strict compliance with the following:

a. If a bid is by an individual, it shall show the name of the individual and shall be signed by the individual with the word "Individually" appearing under the signature. If the individual operates under a firm name, the bid shall be signed in the name of the individual doing business under the firm name.

b. If the bid is by a corporation, it shall be executed in the name of the corporation by the President or Vice President. It shall be attested by the Secretary or Assistant Secretary. The seal of the corporation shall be affixed. If the bid is executed on behalf of a corporation in any other manner than as above, a certified copy of the minutes of the Board of Directors of said corporation authorizing the manner and style of execution and the authority of the person executing shall be attached to the bid or shall be on file with the Department.

c. If the bid is made by a partnership, it shall be executed in the name of the partnership by one of the partners.

d. If the bid is a joint venture, it shall be executed by each of the joint venturers in the appropriate manner set out above. In addition, the execution by the joint venturers shall appear below their names.

7. The bid shall not contain any unauthorized additions, deletions, or conditional bids.

8. The Bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.

9. The bid shall be accompanied by a bid bond on the form furnished by the Department or a bid deposit. The bid bond shall be completely and properly executed in accordance with the requirements of Section 1.2-6. The bid deposit shall be a certified check or cashiers check in accordance with Section 1.2-6.

10. The bid shall be placed in a sealed envelope and shall have been delivered and received by the Department prior to the time specified in the invitation to bid.

1.2-6 BID BOND OR BID DEPOSIT

Each bid shall be accompanied by a corporate bid bond or a bid deposit of a certified or cashiers check in the amount of at least 5% of the total amount bid for the contract. No bid will be considered or accepted unless accompanied by one of the foregoing securities. The bid bond shall be executed by a Corporate Surety licensed to do business in North Carolina and the certified check or cashiers check shall be drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation and made payable to the Department of Transportation in an amount of at least 5% of the total amount bid for the contract. The condition of the bid bond or bid deposit is: the Principal shall not withdraw its bid within 60 days after the opening of the same, and if the Board of Transportation shall award a contract to the Principal, the Principal shall within 14 calendar days after the notice of award is received by him give payment and performance bonds with good and sufficient surety as required for the faithful performance of the contract and for the protection of all persons supplying labor and materials in the prosecution of the work; in the event of the failure of the Principal to give such payment and performance bonds as required, then the amount of the bid bond shall be immediately paid to the Department as liquidated damages or, in the case of a bid deposit, the deposit shall be forfeited to the Department.

When a bid is secured by a bid bond, the bond shall be on the form furnished by the Department. The bid bond shall be executed by both the Bidders and a Corporate Surety licensed under the laws of North Carolina to write such bonds.

The execution by the Bidder shall be in the same manner as required by Section 1.2-5 for

the proper execution of the bid. The execution by the Corporate Surety shall be the same as is provided for by Section 1.2-5, Item 6b, for the execution of the bid. The seal of the Corporate Surety shall be affixed to the bid bond. The bid bond form furnished is for execution of the Corporate Surety by a General Agent or Attorney in Fact. A certified copy of the Power of Attorney shall be attached if the bid bond is executed by a General Agent or Attorney in Fact. The Power of Attorney shall contain a certification that the Power of Attorney is still in full force and effect as of the date of execution of the bid bond by the General Agent or Attorney in Fact. If the bid bond is executed by the Corporate Surety by the President or Vice President, and attested to by the Secretary or Assistant Secretary, then the bid bond form furnished shall be modified for such execution, instead of execution by the Attorney in Fact or the General Agent.

When a bid is secured by a bid deposit (certified check or cashiers check), the execution of a bid bond will not be required.

1.2-7 DELIVERY OF BIDS

All bids shall be placed in a sealed envelope having the name and address of the Bidder, and the statement "Bid for the Construction of State Highway Project No **16.71001** in CARTERET County" on the outside of the envelope.

If delivered prior to the Bid Date, Bids may be delivered in person or by USPS, Federal Express, etc. to the Contract Officer, Randy Garris, PE. at:

Design Services Unit
Century Center 2 (Delivery)
1020 Birch Ridge Drive
Raleigh, NC 27610
Attention: Contract Officer
(919) 250-4124

If delivered in person to the Contract Officer, bids shall have been received prior to **2:00 pm** on the day of the bid opening. If delivered by mail, bids shall have been received prior to **2:00 pm** on the day of the bid opening. Bids received after the times specified above **will NOT** be accepted and will be returned to the Bidder unopened.

1.2-8 WITHDRAWAL OR REVISION OF BIDS

A Bidder may, without prejudice to himself, withdraw a bid after it has been delivered to the Department of Transportation, provided the request for such withdrawal is either in writing or by telegram to the Chief Engineer of Operations or the Engineer presiding over the public opening of bids before the date and time set for the opening of bids. The Bidder may then submit a revised bid provided it is received prior to the time set for opening of bids.

Only those persons authorized to sign bids under the provisions of Article 1.2-5, Item 6 shall be recognized as being- qualified to withdraw a bid.

1.2-9 RECEIPT AND OPENING OF BIDS AND NON-COLLUSION AFFIDAVIT

(a) RECEIPT AND OPENING OF BIDS

Bids will be opened and read publicly at the time and place indicated in the invitation to bid. Bidders, their authorized agents, and other interested parties are invited to be present.

A bid will be received and opened from any Bidder who:

1. Is prequalified in accordance with the provisions of Article 1.2-2, and
2. Has delivered the bid to the place indicated in the Specifications prior to the time indicated in the invitation to bid.

A bid received from a Bidder who has not complied with the above requirements will be returned to the Bidder unopened and under no circumstances will be considered for award.

(b) NON-COLLUSION AFFIDAVIT

In compliance with Section 112(c) of Title 23 USC. and current regulations of the Department, each and every Bidder will be required to furnish the Department with an affidavit certifying that the Bidder has not entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with his bid on the project. Affidavit will be included in the proposal form as part of the Signature sheets. Execution of Signature sheets will also constitute execution of Non-Collusion Affidavit. Signature sheets shall be notarized.

1.2-10 REJECTION OF BIDS

Any bid submitted which fails to comply with any of the requirements of Articles 1.2-5, 1.2-6 and 1.2-7 shall be considered irregular and may be rejected, except that any bid which fails to comply with Section 1.2-5, Item 3 shall be considered irregular and will be rejected.

In addition to the above, any bids submitted by any Bidder who has failed to comply with the following requirement will be rejected.

Any bid submitted by a Bidder who at the time of the submission is bankrupt, insolvent, or has committed an act of bankruptcy or financially unable to meet its outstanding obligations, shall be considered irregular and will be rejected.

Any Bidder who has been disqualified from bidding shall have been requalified prior to the time set for receiving bids. The right to reject any and all bids shall be reserved to the Board.

1.2-11 DISQUALIFICATION OF BIDDERS

Any one of the following causes may be justification for disqualifying a Contractor from further bidding until he has applied for and has been requalified in accordance with Article 1.2-2:

1. Unsatisfactory progress in accordance with Section 1.7.
2. Being declared in default in accordance with Section 1.32.
3. Uncompleted contracts which, in the judgement of the Chief Engineer of Operations, might hinder or prevent the prompt completion of additional work if awarded.
4. Failure to comply with prequalification requirements.
5. The submission of more than one bid for the same work from an individual, partnership, joint venture, or corporation under the same or different names.
6. Evidence of collusion among Bidders. Each participant in such collusion will be disqualified.
7. Failure to furnish a non-collusion affidavit upon request

1.3 AWARD AND EXECUTION OF CONTRACT

1.3-1 CONSIDERATION OF BIDS

After the bids are opened and read, the amount bid for each item and the total bid will be checked and made known to the public.

The right is reserved to reject any or all bids, to waive technicalities, to request the low bidder to submit an up-to-date financial and operating statement, to advertise for new bids, or to proceed to do the work otherwise, if in the judgment of the Board, the best interests of the State will be promoted thereby.

1.3-2 AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made by the Board of Transportation to the lowest responsible Bidder whose bid complies with all the requirements prescribed. The lowest responsible Bidder will be notified by letter mailed to the post office address shown on his bid that his bid has been accepted and that he has been awarded the contract. This letter shall constitute the notice of award. The notice of award, if the award be made, will be issued within sixty days after the opening of bids, except that with the consent of the successful Bidder the decision to award the contract to such Bidder may be delayed for as long a time as may be agreed upon by the Department of Transportation and such Bidder. In the absence of such agreement, the lowest responsible Bidder may withdraw his bid at the expiration of the 60 days without penalty if notice has not been issued.

1.3-3 CANCELLATION OF AWARD

The Board of Transportation reserves the right to rescind award of any contract at any time before the receipt of the properly executed contract and contract bonds.

1.3-4 RETURN OF BID BOND OR BID DEPOSIT

All bid bonds will be retained by the Department until the contract is executed by the successful Bidder, after which all such bid bonds will be destroyed unless the individual bid bond form contains a note requesting that it be returned to the Bidder or the Surety.

Checks which have been furnished as a bid deposit by all Bidders other than the three (3) lowest responsible Bidders will be retained not more than ten (10) days after the date of opening of bids. After the expiration of such period, Department of Transportation warrants in the equivalent amount of checks which were furnished as a bid deposit will be issued to all Bidders other than the three (3) lowest responsible Bidders.

Checks which have been furnished as a bid deposit by the three (3) lowest responsible Bidders will be retained until after the contract bonds have been furnished by the successful Bidder, at which time Department of Transportation warrants in the equivalent amount of checks which were furnished as a bid deposit will be issued to the three (3) lowest responsible Bidders.

1.3-5 CONTRACT BONDS

The successful Bidder, within 14 calendar days after the notice of award is received by him, shall provide the Department with a contract payment bond and contract performance bond each in an amount equal to 100 percent of the amount of the contract. All bonds shall be in conformance with GS44A-33. The Corporate Surety furnishing the bonds shall be authorized to do business in the State.

1.3-6 EXECUTION OF CONTRACT

As soon as possible following receipt of the properly executed contract bonds, the Department will complete the execution of the contract, retain the original contract and return one certified copy of the contract to the Contractor.

1.3-7 FAILURE TO EXECUTE CONTRACT

The successful Bidder's failure to file acceptable bonds within 14 calendar days after the notice of award is received by him shall be just cause for the forfeiture of the bid bond or bid deposit and rescinding the award of the contract. Award may then be made to the next lowest responsible Bidder or the work may be readvertised and accomplished under contract or otherwise, as the Board of Transportation may decide.

1.4 INTENT

(a) It is the intent of these specifications that the Contractor shall Build, Equip, Launch, Test and Deliver to the Owner one (1) vessel, as described, complete and ready for service in every respect as concerns the work covered herein. All specifications written for singular description shall be applicable for the construction of one (1) vessel. The Contractor shall provide the necessary plant, launch/railway and lay days to construct the vessels, all tools, materials, machinery, equipment, fittings and labor, including upkeep of the vessel until final acceptance by the Owner.

(b) The Contractor shall make removals and replacements as necessary to effect the work covered by these specifications as a part of the contract if required.

(c) The Contractor shall coat all new work and restore and recoat all areas disturbed due to the work required by these specifications as a part of the Contract.

(d) Any work, equipment, machinery, or other part or parts of the vessels injured or damaged while the vessel is in the custody of the Contractor during the progress of the work covered by these specifications shall be repaired by the Contractor to the satisfaction of the Inspector, at no cost to the Owner.

(e) Any work or detail omitted from these specifications or plans, but necessary to complete the specified construction covered herein in accordance with good shipbuilding practice shall be furnished by the Contractor as a part of the Contract at no additional cost to the Owner, and nothing herein or on the plans shall be construed as meaning otherwise.

(f) Whereas the true intent and meaning is manifest, the Contractor shall not be relieved from fulfilling the full requirements of the contract plans, contract guidance plans and specifications, or of the responsibility for producing satisfactory results, or of properly performing any work by any of the following:

Absence of the details where the essential features, functions and arrangements are defined. Mistakes in description of hull or machinery details which, if not corrected, would interfere with the proper performance of the items involved.

The Contractor is responsible for proper performance of the Contract in accordance with the full manifested intent of these specifications despite any error, omission, discrepancy or lack of clarity in the plans or specifications which should reasonably have been apparent to an experienced Contractor upon a careful and critical review.

(g) The intent above given is of the essence of these specifications.

1.5 INSPECTION

(a) All work and materials entering into the construction of the vessels and their machinery, fittings and equipment shall be subject at all times to the inspection and approval of the Inspector and where applicable the U.S. Coast Guard.

(b) It is the duty of the Inspector to insist that the Contractor perform all work and supply all materials as called for in these specifications. The Contractor shall perform all work in a satisfactory manner. In the event that any work or materials fail to comply with these specifications the Inspector will notify the Contractor in writing of the deficiency or unsatisfactory work as soon as it comes to his attention.

(c) Any work not satisfactory, whether from defective material, departure from specifications, or poor workmanship, or any work performed in the absence of the Inspector and later found to be unsatisfactory, shall be removed and replaced promptly to the satisfaction of the Inspector, at the Contractor's expense.

(d) The Owners, the Inspector, and any person employed by the same shall be allowed access to the work at anytime during the regular working hours of the Contractor, or at such other times as will not entail additional expense to the Contractor, and the Contractor shall furnish all reasonable facilities and give ample time for such inspection.

A desk, desk chair, 4-drawer legal file cabinet with lock and keys, three (3) chairs, a 3' x 6' x 32" drawing board and compact copy machine similar to Sharp Model Z8511 shall be provided in a private office apart from facilities occupied by contractor's personnel. Office shall be for the inspector's and owner's sole use during the contract period. The office shall be provided with telephone service and telefax connection. Necessary long distance calls made to

discuss questions arising concerning the work shall be at the Contractor's expense. Telephone service shall be two private lines not subject to connection to contractor's telephone network listed in the Owners name. Contractor shall provide internet service access as a part of this contract. Additional telephone service on contractor's system may be installed.

(e) The Inspector shall determine the amount, quality, acceptability, and witness all parts of the work. He shall interpret the specifications, Contract Documents and supplemental agreements, if any, and he shall decide all other questions in connection with the work. The Inspector shall have no authority to approve or order changes in the work which alter the terms or conditions of the Contract. The Inspector shall confirm in writing within five (5) days any oral order, direction, requirement, or determination. The decision of the Inspector shall be final and binding on both Contractor and Owner.

(f) Nothing herein shall be taken to relieve the Contractor of complete responsibility for unsatisfactory workmanship, faulty materials or other deficiencies of any kind whatsoever that are the result of his work, his sub-contractors work, or material purchased or provided and installed by him.

(g) The Inspector shall have general surveillance of the work. All orders and communications from the Contractor shall be transmitted through him. He shall have authority to stop the work whenever such stoppage may be necessary to ensure the proper execution of contract, said stoppage is to be a Contractor caused delay in computing liquidated damages, if any, for late delivery.

(h) As the Inspector is, in the first instance, the interpreter of the conditions of the

contract and the judge of its performance, he shall use his powers under the contract to enforce its faithful performance.

(i) The Contractor shall notify the Inspector prior to any and all Contractor scheduled meetings or inspections relevant to this contract which involve any representative of the U.S. Coast Guard. The Inspector shall be given the opportunity, at his option, to be present on such occasions. At no time shall the Contractor allow access to any portion of this contract by personnel other than those employed by the Contractor without first receiving the Inspectors approval.

1.6 LAWS, PERMITS, AND REGULATIONS

(a) The Contractor shall obtain and pay for all licenses and permits and shall pay for all fees and charges for connection to outside service and use of property other than the site of the work for storage of materials and other purposes.

(b) The Contractor shall comply with all laws, ordinances, and regulations applicable to the work unless in conflict with contract requirements. If the Contractor ascertains at any time that any requirements of this Contract are at variance with applicable laws, ordinances, or regulations he shall promptly notify the Inspector and Owner and any necessary adjustment of the Contract shall be made as specified under Changes in the work.

(c) Any questions arising under this contract shall be determined under the laws of the State of North Carolina.

(d) The Contractor shall furnish the Inspector copies of affidavits upon request giving the original dates, renewal dates and expiration dates of all labor contracts, if any, related to any phase of the work to be performed in the shipyard under this contract.

1.7 PROSECUTION OF WORK (LIQUIDATED DAMAGES)

(a) Date of completion is the essence of any contract resulting from these specifications and plans. The Contractor will be required to complete all work no later than the date stated in the contract.

(b) Should progress of the work lag or fall behind schedule, the Contractor shall direct sufficient additional labor to work, including overtime if required, to maintain the contract delivery date, at no additional cost to the Owner.

(c) The Contractor will be required to pay liquidated damages for each and every day that delivery is delayed beyond the contract date for its completion. The timely completion of the performance of this contract has a substantial financial value to the Owners, which value is difficult or impossible to forecast or evaluate exactly. It is, therefore, stipulated and agreed that the value to the Owners for each calendar day of delay in delivery of the vessel by the Contractor to the Owners beyond the contract completion date of the work to be performed by the Contractor under this contract shall be a fixed sum and shall be set in advance. Upon the foregoing consideration and for the purpose of this contract, the sum of Five Hundred Dollars (\$500.00) per day is hereby mutually agreed upon as the sum which the Contractor shall give to the Owners as liquidated damages for each calendar day delayed beyond the contract completion date that the work remains unfinished and said vessel remains undelivered.

(d) For the purpose of these specifications in determining the days for which liquidated damages will be charged the Contractor shall be entitled to an extension of the contract time or to an apportionment and remittance of liquidated damages when a contract is not completed within the contract time to the extent that delays to the current controlling operations, or operations,

were caused by acts of God as defined herein, or acts of the Boards or its agents. The Contractor, however, shall be entitled to an extension of contract time, or an apportionment and remittance of liquidated damages, only to the extent and in the proportion that such delays were caused by acts of God or acts of the Board, and it is understood that the Board does not hereby waive or release any claim against the Contractor for liquidated damages when the contract is not completed within the contract time for any reason whatsoever other than the said acts of God or acts of the Board. A request by the Contractor for an extension of time shall be made to the Inspector within five (5) days after such delay has occurred and he shall make a determination as to the cause of the delay and the amount of time that the contract should be extended by reason of such delay.

(e) It is understood and agreed that if a claim is filed for an extension of contract time, or an apportionment and remittance of liquidated damages, the burden of proof shall be upon the Contractor to establish the acts of God or the acts of the Board causing the alleged delay; and if the Contractor fails to sustain the burden of proof, he shall not be entitled to an extension of contract time, or to an apportionment and remittance of liquidated damages. The burden of proof herein referred to shall be the same that in other cases of like nature exists. Proof by the Contractor of delays due to an act of God or act of the Board to enforce or collect liquidated damages due to any other reason whatsoever.

(f) The Contractor is hereby notified that no consideration will be given to requests for remissions of liquidated damages for any reason whatsoever, except as covered by Paragraph 1.7 herein. The Contract date for completion will be changed on a negotiated basis for any work authorized or deleted by supplemental agreements to the original contract.

1.7-1 WORK PROGRESS

(a) It is the intent of these specifications that the Contractor shall commence work on the date of availability as noted elsewhere herein. The Contractor shall not begin work prior to the date of availability without written approval of the Inspector. If such approval is given and the contractor does begin work prior to the date of availability, the department will assume no responsibility for any delays caused prior to the date of availability by any reason whatsoever, and such delays, if any, will not constitute a valid reason for extending the completion date.

(b) The Contractor shall not perform any work on the project until the Department has received the properly executed contract and contract bonds.

(c) It is further the intent of these specifications that the Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision and with equipment, material, and method of construction as may be required to complete the work described in the contract, or as may be amended by the completion date.

1.7-2 PROGRESS SCHEDULE

(a) The Contractor shall prepare and submit for approval by the Inspector a schedule of his proposed working progress on the project.

(b) The proposed progress schedule shall be submitted no later than the date of the project preconstruction conference (Section 1.7-3) and before any work is begun on the project.

(c) When conditions beyond the Contractor's control have adversely affected his progress, the Contractor may submit a revised progress schedule to the Inspector for approval. Such revised progress schedules will not be approved unless accompanied by a detailed written statement giving the Contractor's reasons for the proposed revision.

(d) When, at any time during construction or repair of the project, the Contractor's progress deviates substantially from the latest approved progress schedule, the Inspector may request the Contractor to submit a revised progress schedule. Revised progress schedules requested by the Inspector shall be submitted within seven (7) days after the date of such request.

1.7-3 PRECONSTRUCTION CONFERENCE

(a) Immediately after receipt of notice of award, the Owner and the Contractor will establish a mutually agreeable date on which the preconstruction conference will be held. The Contractor's project superintendent and other individuals representing the Contractor who are knowledgeable of the Contractor's proposed progress schedule or who will be in charge of major items of the work shall attend the preconstruction conference. Contractor shall provide necessary personnel to take, transcribe, correct, reproduce and distribute minutes of the pre-construction meeting.

1.7-4 CONSTRUCTION CONFERENCES

(a) After work on the project has begun, initially construction conferences shall be held monthly and adjusted to suit construction. The construction conferences are to be scheduled at times which are mutually agreeable to both the Contractor's project superintendent and the Inspector. It shall be the superintendent's responsibility to attend the conference. Contractor may elect to have other members (See Section 1.7-3) of his staff attend construction conferences. Contractor shall provide necessary personnel to take, transcribe, reproduce and distribute minutes of each meeting.

1.8 MATERIALS

(a) All materials intended for use, and all equipment used shall be new and as specified or as shown on plans except where Owner furnished (Paragraph 1.17). Should the Contractor desire to substitute any material or equipment for that specified he must first obtain an order from the Owner in writing. (See also paragraphs 1.5 and 1.11 herein.)

(b) It is the responsibility of the Contractor to furnish sufficient data and information on materials he wishes to substitute to allow the Owner to make a decision.

(c) All equipment, shall be of marine quality. (See Section 1.10 & 1.11 "Plans and Specifications").

(d) Steel plate, shapes and other metal work shall be of the best quality domestic steel products for its particular purpose. (See special provision "Domestic Steel Products" dated April 19, 1994.)

(e) Paints, electrical, piping, and all other materials shall conform to the standards of first class material for passenger vessels, as specified herein.

(f) All galvanizing shall be "hot dip" process.

(g) All plywood shall be waterproof marine type in all cases, with all edges sealed before installation, but after cutting to shape.

(h) Two (2) copies of each purchase order for all materials, articles, and equipment purchased by the Contractor shall be furnished to the Inspector at the time of issue to the vendor.

Purchase orders shall show unit and total price of materials, articles and equipment purchased and vendors complete address.

(i) Materials requiring specified approval, which are ordered by the Contractor before approval, shall be entirely at the risk of the Contractor.

(j) Where material herein specified is not available on the present market, alternate materials of equal quality at no additional cost may be processed for approval of the Inspector by the Contractor.

(k) Any material or equipment provided by the Contractor which proves defective and unfit for service either before or after installation and whether previously approved or not shall be replaced by the Contractor with satisfactory items without additional cost to the Owner.

1.9 WORKMANSHIP

(a) Workmanship throughout shall be first class and high grade in all respects for passenger vessels. Particular care shall be taken to insure fair lines, adequate and proper fastening, suitable butts and scarfs, smooth surfaces, neat and substantial work, and the maximum degree of watertightness. All welding shall be done by competent USCG/ABS certified welders. All plating shall be free of uneven and wavy lines or wrinkles after welding. (See paragraph 1.27 herein also).

(b) The work shall be executed by competent workmen, in each trade, experienced in marine construction, and under adequate supervision to assure first class workmanship throughout.

(c) Ragged edges or sharp projections which are hazardous to operating personnel, contribute to additional maintenance, or detract from the finished appearance shall be eliminated.

(d) Dimensional tolerances, fit alignment, fairness and finish shall be in accordance with approved working plans. Where tolerances are not given on working drawings or specified elsewhere, a standard of plus or minus 1/64 of an inch will be assumed for unmachined fits. Machined fits shall be in accordance with S.A.E. Standards for tolerance and finish.

(e) Fittings at openings through decks and bulkheads for pipes, cables, etc., shall be properly designed to maintain watertight integrity, reduce transmission of heat and eliminate transfer of machinery vibration and noise to the hull structure. Doubler plates or other suitable strengthening shall be fitted at all bulkhead and hull penetrations.

(f) Piping and cables shall be run as far inboard and shall pierce the bulkheads as close under the decks and as near the top of the bulkheads as practicable.

1.9-1 ON SITE PROJECT SUPERVISION

(a) At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who has been authorized to act in a supervisory capacity over all work on the project including work subcontracted. This individual who has been so authorized shall be experienced in the type of work being performed and is to be fully capable of managing, directing and coordinating the work; of reading and thoroughly understanding the contract; and of receiving and carrying out directions from the Inspector. He shall be an employee of the Contractor.

(b) The project Supervisor shall be authorized to accept and sign for notices and instructions, if and when found necessary, from the Inspector.

(c) The Project Supervisor shall be identified at the time of the Pre-construction Conference, Section 1.7-3, and shall meet with the Inspector's approval. Should it become

necessary to assign another individual in this position, the Contractor shall provide the Inspector written notification within five (5) working days of the proposed change. The individual assigned shall be approved by the Inspector and shall be capable of assuming the duties as outlined in Section 1.9-1 (a) and (b) herein.

1.10 PLANS AND SPECIFICATIONS

(a) All work shall conform to these specifications, the plans, the Notice to Bidders and the Bid Proposals, which are made a part hereof by reference.

(b) The plans and these specifications are to be considered as mutually explanatory or supplementary, and any feature shown on one and not on the other shall have the same force and effect as though shown on both. Should any discrepancy appear or any misunderstanding arise as to the importance of anything contained in them it shall be called to the attention of the Marine Engineer or Inspector immediately, and no further work performed on the item in question until a decision is reached. Work performed based on such an error, omission, discrepancy or lack of clarity shall be at the Contractor's risk and expense. These plans and specifications shall be used by the Contractor as guides in the prosecution of the work required.

(c) The following plans will be furnished by the Owners to the Contractor: (List of plans is attached ahead of Part II of the specifications). All drawings were produced by computer aided drafting methods. CAD drawings were developed using AUTODESK, AUTOCAD REL.2000.

(d) All Contract Plans **will not be** submitted to the U.S. Coast Guard for approval.

(e) It is expressly understood that the Contractor shall verify all quantities and figures will be held responsible for the proper coordination of all dimensions and the work, and that the furnishing of the drawings herewith will not relieve the Contractor from responsibility for errors or omissions in dimensions and quantities. No addition to the cost will be entertained for errors, omissions or for discrepancies found between actual details and the plans and specifications after the proposal has been received.

(f) The Owner reserves the right to alter the drawings to correct or avoid impossible conditions created by prosecution of the work. The alterations necessary in the work, if any, are to be made by the Contractor without additional cost to the Owner.

1.11 DETAIL WORKING DRAWINGS

(a) Detail working drawings shall be prepared in accordance with contractor prepared working drawings list provided ahead of Section II of these specifications. Two (2) copies of each contractor prepared and/or revised drawing shall be submitted to the owner for review and comments. Owner comments, if any, shall be incorporated in drawings.

No deviations from approved working drawings shall be made without the written approval of the Inspector.

(c) Plans/Drawings shall be prepared by the Contractor's Engineering Design personnel or by subcontract with an approved Engineering Design Agent. All plans shall be revised providing details, arrangements and material list to indicate "as built" condition. ACAD original drawings shall reflect all changes to "as built" conditions. Drawings shall be plotted on three

(3) mil polyester film in accordance with Section 1.11 (d) herein. All revised, Owner furnished and Contractor prepared diskettes shall be provided to Owner.

(d) Original drawings shall be of uniform "D" size 24" x 36" prepared on 3 mil Polyester base drafting film matte both sides and to comply with sample format for title block etc. as provided to the contractor. All original drawings shall be capable of reproduction in clear and legible copies. Drawing number sequence shall be maintained in accordance with Owner furnished drawings. Original drawings prepared by the Owner and identified in the list ahead of Part II shall be provided to the contractor.

The contractor **will be** required to provide other engineering to complete the vessel such as electrical wiring layout, piping, safety, floor plate details. Plans provided by NC DOT Ferry Division are for guidance to the contractor.

(e) Ferry Division Engineering shall provide contract guidance drawings for construction but as-built drawings will be furnished by the contractor at the end of the project.

(g) The Inspector will cooperate with the Contractor in developing a plan approval procedure in order to expedite plan approval with minimum delay. Approval will be given subject to correction by the Contractor of any errors, omissions, and/or interferences contained thereon and compliance with the plans and specifications as previously noted. All revisions made to approved working plans shall be concisely described in a suitable revision column and copies forwarded to the Inspector for comments. Such revisions shall not negate the intent of the original approval without written consent of the Owner.

(h) Upon completion of the contract and at time of vessel delivery, all original drawings and CD's shall become the property of the North Carolina Department of Transportation and it is understood that the Department of Transportation shall reproduce and issue above noted drawings in any manner for future use. One (1) set of the final approved drawings and one (1) set of the originals shall be delivered with the vessel. Each set of drawings shall be individually packaged or boxed and shall be labeled as to contents. A list of drawings shall be included in each set.

(i) Shop sketches and templates shall be prepared by the Contractor as required for his shop use. One (1) copy of shop sketches shall be provided to the Owner.

(j) The Contractor shall keep, on the work site, a copy of the drawings (latest revision) and specifications including all authorized supplemental agreements and shall at all times give the Owner and their authorized representatives access thereto. All drawings and specifications, except the signed contract, shall be returned to the Owner at the completion of work.

1.12 ALTERATIONS (CHANGES)

(a) The Owner reserves the right to make any deletions or additions to the work to be performed without invalidating the contract, or giving notices to the sureties. Any change in cost due to alterations or deletions shall be negotiated prior to accomplishment, or performed on a time and material basis as hereinafter provided in this section, at the Owner's option, and approval of any such changes shall be authorized by the Owner and accepted by the Contractor in writing on the Standard form provided prior to start of the work. Optional items, if any, may be approved by issue of a supplemental agreement by the Owner at the cost quoted therefor.

(b) In making any alteration on a time and material basis, the charge or credit for the change shall be determined by the labor rates submitted with the bid proposal and purchase orders for materials to be used. Material shall be at invoiced cost to the Contractor plus 15%. Deletion of equipment and/or material is to be negotiated on a cost of material and labor estimated basis.

(c) The Contractor shall, within five (5) working days, when required by the Owner, furnish to the Owner an itemized breakdown of the man-hours, quantities, and prices used in computing the value of any change that might be ordered.

(d) The completion date will be changed to cover additions to, or deletions from the contract, on a negotiated basis. (Paragraph 1.7 (d) is to be used for guidance.)

(e) The Contractor may not substitute other material for that specified, except as covered by Paragraph 1.8 herein.

1.13 CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

(a) The Contractor shall not commence work under this contract until he has obtained all the insurance required here under and such insurance has been approved by the Owner; nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance has been so obtained and approved. Approval of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder.

(b) COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE

The Contractor shall take out and maintain during the life of this contract the statutory Workmen's Compensation and Employer's Liability Insurance for all his employees to be engaged in work under this contract and in case of any such work is sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation and Employer's Liability Insurance for all of the latter's employees to be engaged in such work and shall save the Owner harmless.

(c) BODILY INJURY LIABILITY AND PROPERTY DAMAGE

LIABILITY INSURANCE

The Contractor shall take out and maintain during the life of this contract such Bodily Injury Liability and Property Damage Liability Insurance as shall protect him from claims for damages for personal injury, including death, as well as from claims for property damage, which may arise from operations under this contract whether such operations be by himself or by anyone directly or indirectly employed by either of them, and shall save the Owner harmless.

(d) INSURANCE ON VESSEL

The Contractor shall, at his expense, from the time construction starts at his facility to the time of final acceptance at Cherry Branch Operations, after completion of all work and testing, furnish all risk insurance as provided in American Institute Builder's Risk Form dated February 8, 1979, amended by striking out line 217 covering the value of the vessel in the full amount and shall save the Owner harmless from any damage whatsoever while the vessel is in custody of the Contractor. The insurance shall be in a responsible company or companies authorized to transact such business in the State in which the construction is being accomplished, and in the State of North Carolina. A statement agreeing to accept service of legal action in North Carolina must accompany the policy. The policy shall be made payable to the Owner. Where the Contractor carries a blank plant policy a rider must be obtained designating the Owner as first beneficiary under the policy in the amount stated.

For the purpose of this Contract the value of the vessel shall be placed at the Total Bid Amount (not to include cost of crane).

1.14 ACCIDENT PREVENTION

Precaution shall be exercised at all times for the protection of persons, including employees, and property. The safety provisions of applicable laws shall be observed. Machinery equipment and all hazards shall be guarded or eliminated in accordance with the best marine construction safety practices.

1.15 SUBCONTRACTS

The Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of the contract or any portion thereof; or of his right, title, or interest therein; without written consent of the

Engineer. In case such consent is given, the sublet work shall be performed by the Subcontractor unless otherwise approved in writing by the Inspector. A firm which has been disqualified because of its failure to maintain satisfactory progress will not be approved as a subcontractor until the firm demonstrates the ability to perform the work in a satisfactory manner. Contractor shall submit a certified copy of the actual subcontract agreement executed between the Contractor and Subcontractor prior to written consent being issued by the Inspector. In case such consent is given, the Contractor will be permitted to sublet a portion thereof, but shall perform with his own organization, work amounting to not less the 50 percent of the total original contract amount.

Extra work performed in accordance with Section 1.12 will not be considered in the computation of work required to be performed by the Contractor.

An assignment by operations of law or assignment for the benefit of creditors, or the bankruptcy of the Contractor, shall not vest any right in this contract in the Trustee in bankruptcy, the Contractor's creditors, or the agent of the creditors.

A Subcontractor shall not sublet, sell, transfer, assign, or otherwise dispose of his contract with a Contractor or any portion thereof; or of his right, title, or interest therein; without written consent of the Inspector. When directed by the Inspector, the Contractor shall submit a certified copy of the actual subcontract agreement executed between the Subcontractor and the Second Tier Subcontractor. In the event of an assignment by operations of law or the bankruptcy of the Subcontractor, the Contractor shall have the right, power, and authority, in its discretion, without violating the contract or releasing the surety, to terminate the subcontract. An assignment by operations of law or assignment for the benefit of creditors or the bankruptcy of the

Subcontractor shall not vest any right in this contract in the Trustee in bankruptcy, nor the Subcontractor's creditors or agents of the creditors.

Neither the Contractor, nor any Subcontractor, shall enter into any written or oral equipment lease or rental agreement, materials purchase agreement, and/or labor agreement which circumvents the provisions of this article.

If the Contractor or a Subcontractor enters into a lease or rental agreement for equipment based upon payment for a unit of work, such agreement will be considered subletting of the contract unless the lease or rental agreement is with a commercial equipment company, manufacturer, and/or commercial leasing agency and such firm has been approved by the Inspector. An equipment lease or rental agreement which is based upon unit price per unit of time will not be considered subletting of the contract.

The approval of any subcontract will not release the Contractor of his liability under the contract and bonds, nor will the Subcontractor or the second tier Subcontractor have any claim against the Department of Transportation by reason of the approval of the subcontract.

The Contractor shall as soon as practicable after the signing of the Contract, notify the Owner in writing of the names of the Subcontractors proposed for parts of the work and shall not employ any that the Inspector may within a reasonable time object to as incompetent or unfit.

The Contractor agrees that he is as fully responsible to the Owner for the acts and omissions of his Subcontractors and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

Failure of the Contractor to comply with any of the provisions of this article may be justification for disqualifying the Contractor from further bidding in accordance with the provisions of Section 1.2-11.

1.16 PROTECTION AND CUSTODY OF VESSEL

(a) The Contractor shall take suitable means of protecting the vessel, the engines, and all other machinery, outfit, equipment, piping, wiring, etc. from the start of construction and until the vessel is accepted by the Owner, and he will be held responsible for any damage that may be sustained during this period. (See paragraph 1.13 herein also).

(b) The vessel is agreed to be in the custody of the Contractor from the start of work at his plant until the completion of the vessels, including the tests and trials if required by Section VI herein, and until delivery to the Owner.

(c) The Contractor shall keep all litter and debris removed from the vessels, and shall conform to normal standard safety practices in the prosecution of the work and condition of the shipyard area.

1.17 MATERIAL FURNISHED BY OWNER AND TO BE RETAINED BY OWNER

(a) The Contractor shall receive, handle, and install all Owner furnished material and equipment, if any, and shall provide the required foundation, piping, wiring, etc., to make a complete and satisfactory installation at no additional cost to the Owner as a part of this contract.

1.18 HAULING AND LAY-TIME (SEE SECTION 5.1-5 and 5.1-10)

(a) The Contractor shall provide a suitable marine railway for hauling the vessel and sufficient lay days to complete all work as required, or that may become necessary.

(b) The vessel shall enter the drydock or railway without list and without excessive trim.

If any strain or possible damage to the vessel be suspected or observed, the docking operation shall be suspended and necessary corrective measures taken. Blocking and shores shall be arranged in accordance with standard practice, leaving room in way of rudders, propellers, and other obstructions. The vessel shall remain on the drydock or railway until the underwater work has been satisfactorily completed, then it shall be carefully undocked.

1.19 RAILWAY CERTIFICATION

Bidder shall submit a certificate of condition and capacity of Railway or Drydock intended for use during docking if required. Certificate shall indicate capacity, maximum width, and condition of facility which has been inspected within 30 days of bidding by a Certified Marine Inspector or Registered Professional Engineer.

1.20 GUARANTEE

(a) The Contractor shall guarantee all materials furnished and all workmanship performed by him under these specifications for a period of twelve months following final acceptance by the Owner. This guarantee shall be limited to replacement (including labor) of any parts giving out under normal service because of defect in material or workmanship, and not because of carelessness or neglect on the part of the Owner, his officers or agents; provided further, that any work necessary under this warranty shall be performed without delay by the Contractor at a shipyard or such other place as may be approved by the Owner, and said Contractor shall not be liable for any expense or damages other than as herein called for above. The regular manufacturer's warranty shall be furnished with all equipment, machinery, fitting, etc., provided by the Contractor.

(b) Manufacturer's warranties shall be filed by the Contractor for all equipment provided and installed and said warranties shall be transferred and/or filed in the Owner's name for all equipment, machinery, fittings, etc.; regular warranty periods will apply for all component items not hereinafter listed.

(c) The Contractor shall make good all damage to the vessel or its equipment or contents thereof, which is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the contract and shall restore all disturbed work resulting from the same.

(d) If the Contractor, after notice, fails to proceed promptly to comply with the terms of the guarantee, the Owner may have the defects corrected and the Contractor and his surety shall be liable for all expenses incurred.

(e) All special guarantees applicable to definite parts of the work that may be stipulated in the specifications or other papers forming a part of the contract shall be subject to the terms of this paragraph during the life of such special guarantees.

1.21 FINAL TESTS AND TRIALS

(a) All equipment or other materials furnished by the Contractor and all Owner furnished equipment or other materials installed by the Contractor and all workmanship performed by the Contractor shall be tested by the Contractor as called for herein, at his expense as a part of this contract.

(b) All trials will be conducted by the Contractor at his own expense.

(c) All tests, dock trials, preliminary and sea trials shall be witnessed by the Owner, and any equipment representatives.

(d) Any tests or trials performed in the absence of the Owner will not be recognized and shall be repeated in his presence. (See Part VI herein).

1.22 CERTIFICATES, DOCUMENTS, ETC.

(a) Upon completion of vessel and prior to acceptance the Contractor shall turn over to the Owner "Consent of Surety," "Affidavit of Payment of Labor and Materials" which shall include a list of material and equipment that is unpaid, waivers from suppliers and a statement that the vessel is free and clear of all liens and any other documents called for in other paragraphs herein.

(b) Upon completion of the vessel and after it is delivered, the Owner shall turn over to the Contractor a certified statement that all work required by these specifications, including any extra work is complete and satisfactory on the date of delivery. This statement in no way affects or reflects on the guarantee covered herein.

(c) Upon completion of vessel construction, the contractor shall provide the Owner with a "Master Builder's Certificate" properly executed and acceptable by the U. S. Coast Guard Documentation Office. Upon the issue of an Official Number, the Contractor shall perform necessary work to permanently install, by welding, vessel's Official Number, to the forepeak bulkhead in accordance with Item 5.4.1 (d).

Upon completion of the vessel & prior to acceptance, the contractor shall turn over to the Owner all copies of documents, reports, certificates, radiographic film, quality control & deficiency reports, etc. pertaining to this contract.

1.23 DELIVERY

(a) The vessel shall be delivered by the Contractor to the Owner at the CHERRY BRANCH OPERATIONS FACILITY on Hwy. 306 at Neuse River.

(b) The Owner shall upon delivery turn over to the Contractor all documents required by these specifications, (paragraph 1.22(b)).

(c) The Contractor shall upon delivery turn over to the Owner all documents required by these specifications (paragraph 1.22(a)).

1.24 ACCEPTANCE

When the trials and all tests have been made, and all work completed to the satisfaction of the Owner, the vessel will be formally accepted by the Owner after delivery upon presentation of all necessary documents as described herein.

1.25 FAILURE TO RECOGNIZE

Failure of the Contractor to recognize the need for performance of work or furnishing of materials required to complete the vessel in accordance with the true intent of these specifications shall not be grounds for additional payments or charges under this contract or these specifications.

1.26 PATENT RIGHTS

The Contractor shall pay all royalties and assume defense and indemnity and save harmless the Owner and his officers, from any patent infringements.

There is no knowledge of any infringement.

1.27 WELDING

(a) Qualifications of Welders

All welding performed under this specification shall be done by welders holding a valid qualification certificate issued by the U. S. Coast Guard, or the American Bureau of Shipping, for the work to be accomplished. A list of welders and their certification shall be provided to the Owner. List shall be updated as required.

Qualified welding supervisors shall be employed to assure conformity with standards of workmanship required.

(b) Standards

In general, the design of joints and the amount and type of welding shall conform to Section 30 of A.B.S. Rules for Building and Classing Steel Ships. A more detailed description of the workmanship required can be found under Chapter 52 (Ships) Third Edition of the Welding Handbook, published by the American Welding Society. Electrodes used for welding shall be of type approved by the U. S. Coast Guard for the various types of materials to be welded. Plates shall be smooth and free from wrinkles, uneven joints, wavy surfaces, et cetera. Generally, the welding sequence will be as follows:

1. External seams in hull, trunk, and deckhouse to be double continuous welds.
2. Seams in watertight and oiltight bulkheads to be double continuous welds.
3. Deck fittings and doublers, continuous welds necessary to develop full strength of members; sealing beads elsewhere. Plug welds where required.
4. Frames, brackets, bulkhead stiffeners, floors, webs, stringers, welded continuously at ends to A.B.S. Rules and welded intermittently elsewhere.

5. Welding of secondary members such as bulwark stanchions, supporting brackets for overhang of the decks, fascia bars, et cetera, exposed to the weather, shall be sealed welded all around by a light continuous bead of weld. If intermittent welding is necessary in the way of brackets and stanchions to permit fairness, the brackets and stanchions shall be scalloped between weld increments. All such welding shall be made as smooth as practicable to permit adequate paint coverage.

No welding is to be done on hull plating below or near the waterline while the vessel is afloat. Welds shall be uniform and properly sized. Unsatisfactory welding shall be removed, ground smooth and rewelded in a satisfactory manner.

The striking of an arc on any principal hull plate surface is prohibited unless the plate surface on which the arc is struck is to be incorporated in a welded joint. Marks left by an accidental striking of an arc shall be ground out to a smooth contour, taking care that the plate thickness is not reduced more than ten (10) percent. Arc marks which exceed ten (10) percent of the plate thickness shall be reported at once to the Inspector, and corrective action taken as he directs.

U.S. Coast Guard and/or ABS approved welding procedures shall be provided prior to starting construction.

1.28 CARE DURING CONSTRUCTION

All parts of the vessel, including, but not limited to, structure, deck coverings, fittings, equipage, outfit, furniture, insulation, paint work, machinery, auxiliaries, appliances and apparatus, shall be maintained in satisfactory condition during the entire period of construction and fitting out. All dirt, chips, and scrap material shall be cleaned out at frequent intervals during

construction, and no water shall be allowed to remain in the vessel. The vessel must be thoroughly cleaned throughout at the time of delivery to the Owner. Special measures shall be taken to minimize damage incident to storage, installation and construction and to prevent corrosion or other deterioration, especially to all unpainted, polished, and moving parts. All defects, damage, and deterioration of the vessel, its parts, fittings, and outfit that occur before acceptance of the vessel shall be corrected and repaired by the Contractor at his expense. Equipment, prefabricated parts, furniture, and items such as life floats, lines, and canvas, which are stored in warehouses or on piers during the construction period of the vessel, shall be thoroughly examined for and rid of rats and vermin before being placed on board.

1.29 PAYMENTS AND ACCEPTANCE

(a) Payments shall be made as set out in the Contract.

(b) All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for all materials and work upon which payments have been made or the restoration of any damaged work or any responsibility of the Contractor as herein set forth or as a waiver of the right of the Owner to require the fulfillment of all of the terms of the Contract.

(c) Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the Owner through the Inspector, Consent of Surety for final payment and an Affidavit of Payments of Claims that all subcontractors and suppliers of either labor or materials have been paid all sums due them for work performed or materials furnished in connection with this Contract or that satisfactory arrangements have been made by the Contractor

with such subcontractors and suppliers with respect to the payment of such sums as may be due them by the Contractor (See paragraph 1.35 also).

(d) ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE

No certificate for payment issued by the Inspector and no payment, final or otherwise, nor partial or entire use or occupancy of the work by the Owner, shall be an acceptance of any work or materials not in accordance with the contract, nor shall the same relieve the Contractor of responsibility for faulty materials on workmanship or operate to release the Contractor or his surety from any obligations under the contract or the Performance Bond. North Carolina General Statute 136-29 (2) applies.

1.30 CONTRACTOR'S TITLE TO MATERIALS

No materials or supplies for the work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies for which he accepts partial payment.

1.31 CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

If the work should be stopped under an order of any court or other public authority for a period of three (3) months, through no act or fault of the Contractor or of anyone employed by him, or if the Inspector should fail to issue any certificate for payment within a reasonable time after it is due, or if the Owner should fail to pay to the Contractor within a reasonable time any sum certified by the Inspector, then the Contractor may, upon fourteen (14) calendar days of written notice to the Owner via the Inspector, stop work or terminate this contract and recover from the Owner payment for all work executed.

1.32 OWNER'S RIGHT TO TERMINATE CONTRACT

(a) If the work to be done shall be abandoned or if the Contractor should be adjudged a bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if this contract or any part thereof shall be sublet without previous approval of the Owners; or if this contract or any claim thereunder shall be assigned by the Contractor; if any materials or any tools, machinery or other equipment shall be attached or encumbered, which attachment or encumbrance remains undissolved for a period exceeding ten days; or if at any time the Inspector shall be of the opinion, and shall so certify in writing to the Contractor, that the said work is being unnecessarily delayed by the Contractor, or is not executing said contract in good faith, or is not making such progress in the execution of the work as to indicate its completion within the required time, or if he should persistently or repeatedly refuse or should fail to supply enough properly skilled workmen or proper materials, or persistently disregard laws, ordinances, or the instructions of the Inspector, the Owners shall have the power and right to notify the Contractor to discontinue all work or any part thereof under this contract and thereupon the Contractor shall discontinue such work or such part thereof as the Owner shall designate and the Owners shall thereupon have the power, by contract or otherwise as they may determine, to enter the premises of the Contractor where said vessel is being constructed and complete the work herein described, or such part thereof as they deem necessary; and to use such tools and other equipment and such materials of every description as may be found upon or designated to be used upon said work, and to procure additional tools and other equipment and additional materials for the completion of the same; and

to debit to the Contractor the expense of labor and of additional materials and of additional tools and other equipment so procured, which additional tools and other equipment shall be and remain the property of the Contractor upon the completion of the work; and to credit him with the value of the work so done, as estimated by the Inspector.

(b) The excess of any cost to the Owners caused by or arising from its having taken over the completion of said vessel including compensation for additional inspection, managerial and administrative services shall be paid to said North Carolina Department of Transportation by the Contractor or by the surety on its performance bond, and in such accounting, the Owners shall not be held to obtain the lowest cost for the work of completing the contract, or any part thereof, but all sums actually paid therefore shall be charged to the Contractor.

(c) It is further agreed that in case the Contractor shall not fully complete the contract work at the time stipulated, the Owners, in lieu of the foregoing provision, may at its option pay the Contractor for the parts already done, according to the provisions of the contract, and these specifications, and may treat and consider the parts remaining undone as if the contract was cancelled or abandoned by said Contractor or as if they had never been included in or contemplated by this contract.

(d) No action, proceeding or notice contemplated by the contract on the part of the Owners or Inspector and nothing herein contained shall operate as a waiver or release of any rights of the North Carolina Department of Transportation under this agreement against either the Contractor or its Surety.

(e) For purposes of the above "Abandonment of Work" shall mean any consecutive period of ten (10) calendar days without performance of work on the vessel by the Contractor.

1.33 CLIMATIC CONDITIONS

When so ordered by the Inspector, the Contractor shall suspend any work that may be subject to damage by climatic conditions existing or predicted for the area within 24 hours.

1.34 TAXES

The Contractor shall without additional expense to the Owner pay all applicable federal, state and local and other taxes which are assessed against this work.

1.35 ASSIGNMENTS

The Contractor shall not assign any part of the contract nor shall the Contractor assign any claim due under the contract or monies due or to become due under the contract.

1.36 SPECIAL NOTES

- (a) All bidders are cautioned to clarify any questions prior to submission of proposal.
- (b) The submission of a bid will be considered an acceptance of all requirements of these specifications and all governing laws and ordinances without exception.
- (c) There may be requirements for manufacturers or their representative personnel to perform work on some items of the ship's equipment not covered by these specifications, while at the Contractor's plant. These persons shall be allowed access to the vessel during normal working hours to perform their work. The Contractor shall provide a reasonable amount of electric power for hand tools and light if required.

(d) Any questions concerning these specifications should be addressed to:

North Carolina Department of Transportation
Ferry Division
Room 120 - Maritime Building
113 Arendell Street
Morehead City, North Carolina 28557
Attention: Joe Waldrep
Telephone: (252) 726-2097
Fax: (252) 726-2903

(e) The Owners reserve the right to waive informalities or to reject any or all bids.

(f) All bidders shall be prequalified by the Department of Transportation at least two (2) weeks prior to bid opening.

(g) Proposals received after the date and time set for the opening regardless of the cause will be returned unopened.

1.37 GUARDING

All moving parts of machinery, shafts, etc., shall be shielded to prevent injury to personnel. Shielding fitted on items requiring frequent attention shall have doors, covers or be readily portable.

1.38 QUALITY CONTROL

(a) A competent employee of the Contractor, satisfactory to the Owner, shall from the start of work until the completion of the vessel, maintain quality control over the job. He shall make such inspections and investigations as are necessary to insure that the quality of workmanship, materials and testing is in accordance with that specified.

(b) The quality control employee shall prepare and maintain records of his actions, provide copies to the Inspector and cooperate with the Inspector.

(c) The Inspector shall have access to the quality control employee and his records at all reasonable times during working hours.

1.39 CONTRACT TIME

Contract time shall be the number of calendar days inclusive between the date of availability and the completion date, said dates as being set forth below, including authorized extensions to the completion date.

Date of Availability for this contract is: February 6, 2006.

Final contract completion date for this contract is: August 1, 2006.

Total availability shall include at least seven (7) working days of Contractor's representative(s) at Cherry Branch Facility to provide operational instructions to Ferry Division personnel prior to final acceptance.

SECTION II

CONSTRUCTION SPECIFICATIONS

PROJECT 16.71001

2.0 STRUCTURAL

2.1 DRAWINGS

Plans provided to the Contractor at time of bidding are to be used for Guidance and Construction. It shall be the Contractor's responsibility to verify quantities, provide additional working drawings, and sketches, if required.

2.2 WELDING SCHEDULE

Welding schedule shall be developed by the Contractor in accordance with Section 1.27 (b) and submitted to Owner. Welding details shall be incorporated on appropriate drawings. Limber holes and snipes shall be wrapped welded.

2.3 LOFTING

Hull lines shall be carefully faired using the shell plate structural drawing provided by NC DOT Ferry Division Drawing # CB-140-5.

2.4 HULL STRUCTURE

All steel shapes and plate shall conform to ASTM A-36 steel with certified mill test reports.

2.4-1 CENTER VERTICAL KEEL

No CVK is required.

2.4-2 LONGITUDINAL (HULL)

(a) A longitudinal bulkhead shall be fitted at 7' - 0" off centerline port and starboard.

Longitudinal shall be a bulkhead of 3/8" thickness with vertical stiffeners as indicated on drawing CB-140-4.

(b) The longitudinal bulkhead shall be continuous from bow to stern without interruption.

2.4-3 MAIN DECK LONGITUDINALS

(a) Main deck longitudinal stiffeners shall be 5x3 1/2x5/16 angle as shown on drawing CB-140-4 Main Deck Structure.

2.4-4 MAIN DECK TRANSVERSES

(a) See 2.4-6

2.4-5 FLOORS

Floors shall be installed in the machinery space between frames 12 and 15 indicated as machinery space and storage area from side to side and from bulkhead to bulkhead

2.4-6 TRANSVERSE FRAMES

- (a) Transverse frames shall be fabricated using flange plates as indicated on drawing CB-140-6. Frames are to be spaced 6'-6" apart.

2.4-7 NON TIGHT BULKHEADS

See 2.4-12

2.4-8 WEB FRAMES

See 2.4-6 transverse frames.

2.4-9 END FRAMES

No end frames are required.

2.4-10 BEAMS

2.4-11 SHELL PLATING

- (a) Shell plating shall be 3/8" plate throughout.

2.4-12 WATERTIGHT BULKHEADS

- (a) Main watertight bulkheads shall be located at frames 3, 9, and 15. Other watertight bulkheads shall be installed to form tank boundaries. All transverse and longitudinal bulkheads shall be 3/8" thick.
- (b) All bulkheads shall have 5x3 1/2x5/16 angle vertical stiffeners as indicated on drawing CB-140-6 Transverse Framing.

2.4-13 DECK PLATING

- (a) Main deck plating shall be smooth 3/8" thick plate flat with no camber.
- (b) Main deck stiffeners (see 2.4-3).

2.4-14 BILGE KNUCKLE

(a) A bilge knuckle shall be formed as part of the side shell plate with a 12" radius as indicated on drawing CB-140-5 Shell Structure.

2.4-15 ALUMINUM DECK PLATING BELOW MAIN DECK

- (a) Aluminum floor plate ¼" thick shall be installed from frame 12 to 15 from side to side and from bulkhead to bulkhead but stopping short of bulkhead and side stiffeners.
- (b) Framing for the flooring shall be 2x2x1/4" angle supporting the floor plate on maximum of 24" centers. Angle shall be turned up at the boundary of the flooring to provide a toe kick and prevent tools and small parts from falling below the flooring.
- (c) Flooring shall be attached using stainless steel self-tapping screws.
- (d) Plating shall be installed in sections no larger than 48" x 48". Cutouts shall be provided in-way of valves or equipment to allow access.

2.5 SUPERSTRUCTURE

2.5-1 DECKHOUSE

The deckhouse shall be constructed of steel plate and shapes as follows:

- (a) All sides, roof and bulkheads - 10.2 # plate.
- (b) Stiffeners – 4x3x1/4 Angle

2.6 MOORING, ANCHORING, AND DECK FITTINGS

Mooring, Anchoring and Deck Fittings and their installation are subject to final acceptance of cognizant Officer in Charge, Marine Inspection.

2.6-1 CLEATS AND CHOCKS

(a) Six (6) 30" cast steel cleats shall be located around the main deck as shown on drawing CB-140-2 Main Deck Arrangement.

2.6-2 BITTS

Four (4) 8" double bitts shall be located on the main deck as shown on drawing CB-140-2 Main Deck Arrangement.

2.6-3 TOWING PADEYES

Two (2) 35 ton capacity towing eyepads shall be located on the main deck forward as shown on drawing CB-140-2 Main Deck Arrangement. Padeyes shall be inserted into the main deck as shown on drawing CB-140-4.

2.7 DOORS

2.7-1 DOORS-GENERAL

(a) All doors to have sills as shown on plans. All hollow type doors shall be coated thoroughly with marine quality sealer. Exterior surfaces of watertight doors shall be coated with same paint system adjoining structure in which they are installed.

(b) All doors exposed to weather and not protected by overhang shall have 1/4" x 3" flat bar watershed welded above the door with a curved shape.

(c) All steel exterior doors shall be primed with zinc before final paint is applied.

2.7-2 WATERTIGHT DOORS

Watertight steel quick acting type doors shall be installed on the main deck with access to the deckhouse and deck lockers as shown on drawing CB-140-2

2.7-3 WINDOWS

Watertight windows shall be installed on the deckhouse as shown on drawing CB-140-01 and 02 with stainless steel frames. Windows shall have radius corners 24"x24" size sliding type with insect screens. Windows shall have water shed flat bars installed as per watertight doors.

2.7-4 HATCHES, & MANHOLES

- (a) All manholes in the main deck shall be 20" round multi-bolt with flush countersunk hex socket screws.
- (b) All vertical manholes in tanks shall be 15"x23" raised multi-bolt type.
- (c) All manholes shall have stainless fasteners with brass washers.
- (d) All manholes shall have a section of stainless steel chain attached per ABS regulations.
- (e) Two (2) 4-dog raised watertight hatches shall be located on the main deck p/s as shown on drawing CB-140-02.
- (f) Hatches shall have 6" raised 3/8" steel coamings.

2.7-5 MACHINERY SPACE ESCAPE HATCH

Provide and install one (1) spring balanced, quick acting, watertight hatch on the main deck port side as shown on drawing CB-140-02.

Hatch shall be 24" x 24" with 3/8" x 4" coaming. Hatch shall have stainless steel labels on both sides with arrows showing direction to rotate hand wheels to open and identifying hatch service.

2.8 LADDERS, STAIRWAYS

- (a) Inclined steel ladders and stairs shall be provided for access to the engine. The inclined ladder shall be minimum 30" wide with step spacing no greater than 8" in the vertical dimension. The ladder angle from the horizontal plane shall not exceed 50 degrees.
- (b) Inclined steel ladders shall have MC 10" x 8.4 # channel side stringers, with MC 10" x 6.5 # channel treads with 8" x 24" and 8" x 36" x 9/32" aluminum safety treads, Super-Grip, Type 182 as manufactured by Wooster Products, Inc., Wooster, Ohio. Safety treads shall be attached by stainless steel F.H. countersunk machine screws.
- (c) Vertical steel ladder shall be installed at the side of the deckhouse, at the machinery space escape hatch and at all main deck manholes.
- (d) All ladders shall be removable using clips and 3/4" stainless steel fasteners.

2.9 LIFE SAVING AND SAFETY EQUIPMENT

The type, quantity, location and installation of life saving appliances are subject to final approval of the owner.

2.9-1 BUOYANT APPARATUS

(a) Provide and install 1 U.S. Coast Guard approved, 6 – man life float on the main deck aft near the starboard handrail.

2.9-2 LIFE PRESERVERS AND RING BUOYS

(a) Two (2) Jim Buoy Model JB-SO-30 Life Rings w/ M/N 1123-30 Life Ring Brackets

(b) There will be one life jacket (PFD) located in the bunk rooms above the lockers.

(c) There will be (6) life jackets stored on the main deck in a fiberglass box located as shown on drawing CB-140-2.

2.9-3 FIRE AXES

(a) Contractor shall provide and install one (1) new fire ax with stainless steel bracket.

2.9-4 FIRE EXTINGUISHERS-HAND PORTABLE

(a) Contractor shall provide and install hand portable fire extinguishers, U.S. Coast Guard approved type in following locations.

Engine Room	3	15 # C02
Main Deck Superstructure	3	15# C02
Engine Room Access Trunk	1	15 # C02

2.10 TANKS

2.10-1 FUEL OIL TANKS

A diesel fuel shall be located on centerline between frames 9 and 11 with a capacity of approximately 5,000 gallons. The tank shall be located 30" above the barge bottom and 30" below the main deck. The tank shall have one (1) 15"x23" raised multi-bolt manhole located in the aft bulkhead and a 3/4" sight glass located adjacent to the manhole approximately 36" long with brass shut off valves. A 3/4" drain plug with valve shall be located in the aft bulkhead.

2.10-2 POTABLE WATER TANK

Two (2) potable waters shall be located on centerline between frames 15 and 17 with a combined capacity of 8,500 gallons. The tanks shall be built from 316 stainless steel with A-36 steel stiffeners located outside of the tank. The common centerline bulkhead shall be corrugated. Each tank shall have a 15"x23" stainless steel raised multi-bolt manhole for access on the outside bulkheads. Two 3/4" sightglasses shall be located adjacent to the manhole approximately 36" long overlapping each other.

2.10-3 TANK CLEANING

(a) All fuel, and lubrication oil tanks shall be thoroughly cleaned of all debris, weld splatter, flux and other foreign matter and approved by the Inspector prior to initial filling, and shall be kept closed thereafter until ready for use.

(b) Potable water tank shall be prepared and coated in accordance with Section V. Upon completion of installation, water tank and piping, system shall be disinfected in accordance with local or U.S. Health Department procedures.

2.11 INSULATION

- (a) Insulation shall be fiberglass with vinyl backing.

2.12 DECK COVERING

- (a) Deck covering in quarters shall be vinyl Armstrong flooring. Deck shall be floated before installing flooring to prevent low spots.

2.13 JOINER 3SYSTEM

2.13-1 GENERAL

- (a) The walls and overhead shall be framed to provide proper support using galvanized C-Studs for FRP textured 48"x96" panels. Panels shall be white with wood batten boards at all seams attached with stainless steel screws and finish washers.

2.13-2 FURNISHINGS

- (a) The galley shall have wood cabinetry made of cabinet grade fir plywood with formica finished top. Doors and drawers shall be as shown on drawing CB 140-2 Main Deck Arrangement.

- (b) Door hardware shall be heavy chrome with push type locking hardware to keep doors and drawers closed. All shelves shall have sea rails and be adjustable to allow crew to make changes in height as required.

- (c) A double stainless steel sink will be installed with tall outlet nozzle to allow for cleaning large pots and pans.

- (d) A Sears Kenmore electric stove with built in oven shall be install including overhead power vent ducted to the exterior to remove smoke.

(e) Furnish and install two (2) Sears 20 cu. Ft. refrigerators and two (2) Sears 20 cu. Ft. Freezers as shown on drawing CB 140-2 Main Deck Arrangement.

(f) The mess area shall have a mess table with formica top (color to match galley counter top) with six (6) cushioned chairs on pedestals as shown.

(g) The mess area shall also have a coffee bar as shown with overhead cabinets for storage.

(h) The head shall have two (2) steel showers with wooden grating and concrete floor. The opening shall have a ¾" round bar around the opening and a shower rod overhead for a curtain. There shall be two (2) siphon jet toilets complete with hardware and a tissue paper holder. The doors shall be open at the top and bottom. The toilet enclosure shall be metal with formica covering and heavy chrome hardware. There shall be one lavatory and cabinet with chrome framed mirror and mirror light.

(i) The bunk room shall have one (1) double wood bunk with drawers, two (2) lockers with coat bar and shoe drawer at the bottom, one (1) lavatory and a wall hung desk with chair.

(j) A pantry forward of the galley shall have shelves and two (2) stand up freezers.

2.14 MASTS

(a) Masts construction shall be steel 2" schedule 40 pipe.

(b) Masts shall be arranged to provide foundations for two (2) navigation lights forward.

2.15 STORAGE AREAS

(a) There shall be an overhead trolley system in the storage area below deck as shown on the plans to move material and machinery to the main deck hatches.

SECTION III

CONSTRUCTION SPECIFICATIONS

PROJECT 16.71001

3.0 MACHINERY AND PIPING

3.1 MACHINERY

(a) Materials for the component parts of machinery and equipment shall be as specified in the individual paragraphs of the specifications and/or as noted on the drawings. Materials for machinery and equipment shall be of good marine quality meeting USCG requirements.

3.2 PIPING

(a) All piping shall be as set forth below and elsewhere in these specifications and shall be arranged to obtain optimum operating conditions and shall be compatible with the machinery or equipment served. All piping, valves and fittings shall comply with Material Specifications of the U. S. Coast Guard.

(b) Piping shall be led as directly as practicable. Piping shall include valves, unions and fittings necessary to isolate any piece of equipment for repairs without disrupting the entire system. Unions and flanges shall be used to facilitate installation and subsequent replacement with minimum labor and materials. Piping shall be kept clear of switchgear and wiring insofar as practicable.

(c) All Piping shall be secured by saddle type hangers.

(d) Galvanizing destroyed by welding or other activity shall be replaced. Where welding destroys the galvanizing not more than 6" from the end of the pipe, the method of replacing galvanizing shall be similar and equal to "Galvweld" on piping 3" and above, or "Galvicon" on piping 2 2" and below. All steel piping, regardless of size, shall be hot dipped galvanized when welding or other activity is such that galvanizing is destroyed more than 6" from the end of ends of a pipe section.

(f) Joints for steel piping shall be screwed for size 2" and below and flanged for all other sizes. Vent and sounding pipes shall be welded for all sizes. Hydraulic piping at each directional control valve and hydraulic cylinder shall be screwed; all piping joints shall be of the flared, bite or compression type in accordance with J.I.C. Standards. All burrs shall be removed from the ends of all piping after any cutting and/or threading. Pipe ends shall be dressed with a reamer before installation.

(g) Where not otherwise specified, valves shall be of the flanged or union nut bonnet type. Materials shall be corrosion resisting for the service conditions to which they may be subjected. Valves shall be of the rising stem type. Where three or more valves are located together for the same service they shall be combined into a manifold. Shutoff valves shall be provided in fuel supply lines, one as close to each tank as is practical, and one as close to each fuel pump as practical.

(h) Where pipes are carried through watertight bulkheads, decks or tank tops, the watertight integrity of the structure shall be maintained. Heat sensitive materials shall not be used in piping systems which penetrate watertight sub-divisions where deterioration of such materials would, in the event of fire, impair the watertight integrity of such sub-divisions.

Hydraulic steel tubing and all copper tubing shall penetrate watertight bulkheads and decks using suitable compression type sleeves (Anvil or equal). Where overboard discharge lines or valves are attached to the inside of the hull, the hull shall be reinforced by a doubler plate, to maintain the original strength and integrity. Piping systems shall be designed in accordance with 46 CFR 56.50 but USCG approval will not be required .

(j) All fastenings used to connect valves to sea chests shall be of stainless steel.

(k) All vent pipes and fill pipes etc. that pass through the side shell or main deck plate shall be stainless steel from the penetration outboard for the entire length.

(l) All piping shall be identified by stenciling the system service name on the pipe and/or pipe cover. Abbreviations may be used. Sufficient identification shall be applied to permit pipe tracing within a compartment and outside of a compartment when piping penetrates bulkheads or decks. Piping 1" i.p.s. or smaller may be identified with embossed metal label plates, properly inscribed and wired thereto.

(m) After complete shipboard installation each system shall be thoroughly cleaned and flushed of all foreign matter. Flushing of the piping systems shall be witnessed by the Inspector and performed to his satisfaction.

(n) All piping shall be insulated as necessary to prevent sweating or transfer of heat.

(o) Reducing valves and all other pressure and flow control devices shall be provided with a strainer at the inlet, a relief valve and a pressure gage in the discharge side, and a valved bypass.

3.3 SHIP'S SERVICE GENERATOR EXHAUST

Provide and install Cowl Spiral Silencers, TR/TL Series, Model TS40TR, of size required by caterpillar. Exhaust piping shall be ASTM – A106-72a, schedule 20 pipe. Main deck penetrations shall be seamless 316 schedule 20 stainless steel. Provide flexible sections complete with flanges, hangers, and heat resistant gaskets. Rain caps shall be installed at the ends of the exhaust lines which will terminate 6'-0" above the deckhouse roof.

3.4 EXHAUST SYSTEM INSULATION

(a) Generator engines exhaust systems including exhaust piping, mufflers, flexibles, etc., shall be insulated with material properly secured to all components of system and then sealed. Entire insulation shall be removable blanket type system.

3.5 SHIP'S SERVICE AIR SYSTEM

(a) Contractor shall provide and install a ship's service air system complete with one air receiver, two compressors, piping, valves, and fittings.

(b) Provide and install two (2) electric motor driven Quincy Model 210 air compressors with relief valves set at 150 psi one 80 gallon air receiver with relief valve set at. Air receiver shall be equipped with ½" drain valve and pressure gage with block valve 0-150 psi.

(c) Provide three (3) ship's service air stations. One (1) station shall be adjacent to fire pump unit in the machinery space and two (2) stations on the main deck as indicated by the owner. Provide necessary air regulator, lubricators and pressure gage with block valve at each station.

3.6 PUMPING SYSTEMS

3.6-1 BILGE & BALLAST SYSTEM

(a) The ballast system shall take suction from each of three (3) ballast tanks and transfer to either of the other two tanks to level the barge. The ballast system shall use fresh water only. Two (2) inclinometers shall be located at the pump to monitor the barge condition.

(b) The bilge system shall use the same pump as the ballast system but will take suction from only the machinery space and the two (2) storage areas outboard of the machinery space. The bilge system will consist of (3) suction valves on a manifold with an overboard discharge. Each suction 1 ½" diameter line will be fitted with a non-return valve and brass navy type strainer.

(c) The piping for both systems shall be 2" schedule 80 steel with butt weld fittings and bronze screwed valves as required.

3.6-2 BILGE & BALLAST PUMP

Provide and install one (1) self-priming 5 hp, 2" NPT MP Flo-max pump.

3.7 FRESH WATER SYSTEM

(a) The fresh water system shall furnish water to the galley sink, lavatories, showers and toilets show on drawing CB-140-2 Main Deck Arrangement. All piping below deck shall be 316 stainless steel and all piping above the main deck shutoff valves in the deckhouse shall be PVC or CPVC. There shall be cutoff valves at the galley sink, lavatories, showers and toilets to allow for maintenance. Shutoff valves for the showers are to be located below the main deck in the void area.

(b) There shall be a ½" in-line cartridge type filter with shutoff valve at the galley sink.

3.7-1 FRESHWATER PRESSURE SET

(a) Contractor shall provide and install an approved freshwater pressure set consisting of Sears pressure set with a $\frac{3}{4}$ hp 115 volt, electric motor. Pump delivery capacity shall be approximately 300 GPH. Provide and install Clayton Mark, Model CM8003 bladder type 30 gallon captive air tank, or equal, fitted with pressure operated switch set to start pump motor at 30 psig and shut-off at 40 psig.

3.7-2 WATER HEATER

(a) Provide and install a 40 gallon glass lined water heater. Water heater shall have fiberglass insulation, automatic thermostats, high-temperature limit switch, relief valve, baffled cold water inlet and drain faucet. Water heater shall have two (2) 2500 watt heating elements.

3.8 FUEL OIL PIPING SYSTEM

(a) Provide and install a complete fuel oil piping system to both diesel generators to consist of necessary supply lines, return lines, ball valves and all fittings as required. Piping shall be seamless steel schedule 80 pipe with socket weld fittings. The supply lines the gensets shall have in-line Racor duplex type fuel filters sized for the intended service.

(b) Fuel tank shut-off valves shall be so arranged with stainless steel deck fittings as manufactured by Stow Manufacturing Company, P/N 18389-612, remote reach rods, valve connections, etc., to provide a station outside fuel tank space for closing fuel supply.

A gear type rotary fuel transfer pump shall be installed for filling deck machinery and the crane on the main deck. The transfer pump shall be capable of 10 gpm @ 30 psi with a built-in relief valve. A hose reel with automatic shutoff hand nozzle shall be installed on the main deck as indicated on drawing CB 149-2 Main Deck Arrangement in a drip pan with a hinged aluminum cover designed to prevent rain from getting into the hose reel storage area.

(c) The hose reel shall have 50 foot of ¾” hose of approved type for diesel oil service.

(d) The fuel oil tanks shall have a 2” fill and 2 ½” vent located port and starboard as shown on drawing CB-140-2 Main Deck Arrangement. The fill shall be complete with shut-off ball valve and a bronze cam-lock type connection approximately 24” above the main deck.

3.9 FIRE MAIN SYSTEM

(a) Provide and install one (1) Goulds 1 1/2” x 2”x 7” close-coupled pump driven by a 15 HP TEFC, 208 volt 3600 rpm electric motor. Suction shall be taken from the port sea chest.

(b) Fire main system shall consist of a 2” Sch. 80 fire main connecting two (2) 1 1/2” fire stations one port and one starboard at the deckhouse side, each with 50 feet approved fire hose fitted with approved type AKRON #2032, solid stream and water spray firehose nozzles. Threads for hoses and nozzles shall be 9 threads per inch. Provide and install Elkhart UR-25 or equal valves at each fire hose station.. Adapters between hose and valve are NOT permitted.

(e) Fire hose shall be stowed on a rack adjacent to each fire hose valve, so that it may remain connected at all times. Suitable clips shall be provided to secure the nozzle and spanner wrench at each station.

(f) Install a pressure gauge (0 to 100 psi) in the fire main adjacent to pump discharge.

(e) Install a 3” suction line complete with sea chest valve and duplex strainer equipped with stainless basket.

(f) Piping shall be ASTM-A53 schedule 80 with butt weld fittings.

(g) Pump motor shall be controlled at each fire station by a watertight on/off push button switch.

(h) Drain plugs shall be installed at all low points along with a minimum of two (2) anodes to minimize corrosion.

3.10 SANITARY SYSTEM

(a) Two (2) toilets shall be installed. Provide and install 4” A-53 Sch. 80 piping from toilets to marine sanitation device located in the aft void on the port side.

(b) Provide and install a 1-1/2” clean-out connections with caps at each toilet.

(c) Drains from lavatories and drinking fountains shall have “P” traps and vents and be connected to gray water line for discharge overboard. Drain lines shall be 1 1/2” schedule 40 from sinks and lavatories with 2” schedule 40 lines from showers. Main collection lines shall be minimum 2” schedule 40 with proper slope for drainage overboard. The overboard line shall have a bronze gate valve along with a bronze check valve. Piping from shell to first valve shall be schedule 80.

3.11 MARINE SANITATION DEVICE

(a) Provide and install one (1) Red Fox Marine Sewage Treatment unit sized for (6) persons.

(b) Contractor shall provide and install one (1) MP Flomax 8, closed coupled pump with 1.5 hp @ 1750 RPM. effluent discharge pump.

(c) Pump discharge line shall be equipped with bronze check valve at the pump and terminate on the main deck starboard side with a bronze ball valve and cam lock type fitting.

(d) Contractor shall provide the services of a Factory Authorized Red Fox Technician to inspect the final installation and perform initial start up of the MSD Unit.

3.12 VENTS, OVERFLOWS AND SOUNDING TUBES

3.12-1 VENTS AND OVERFLOWS

(a) Fuel oil tanks shall be fitted with a 3" bronze inverted vent check with flame screens.

(b) All compartments or voids below main deck, engine room, shall be fitted with type 316 stainless steel 2" vent. Vents shall be located at the forward and aft ends of compartments where practicable. Each vent shall have a tapered, wood damage control plug. Plug shall be enclosed with a flat bar basket.

(c) The fresh water tank shall have a 2" goose neck vent and overflow above main deck and be fitted with a bronze inverted vent check complete with insect screen.

(d) All fuel fills and vents shall be surrounded by a containment pan with a minimum capacity of 21 gallons. The containment pan shall be equipped with brass drain plug on the after end as low as possible.

3.12-2 SOUNDING TUBES

(a) The fuel oil tanks shall have a 1 1/2" sounding tube and calibrated sounding rod.

The sounding tubes shall have 3/8" holes below the tank top for venting and terminate in a deck fitting Model 58-61 as supplied by Tate Andale, Inc, with a recessed type plug in the main deck

and shall extend to within 2” of the bottom of the tank. A 6” diameter x 20.4# steel striking plate shall be seal welded to the bottom of the tank under each sounding tube.

(c) The void tanks shall have a sounding fitting in the main deck adjacent to the centerline. A 3/8” diameter hole shall be drilled in the top of tube adjacent to the deck fitting, except in the fuel tank the hole shall be adjacent to the top of the tank, inside.

3.13 SEA CHESTS, STRAINERS AND OVERBOARD DISCHARGES

(a) Forward and aft suction sea chests shall be fitted with removable and hinged 3/8” stainless steel plate strainers. Shell plate strainer to have a minimum open area as indicated on drawing CB 140-5. Sea chest shall be fabricated of 20.4 lb. plate suitably stiffened and installed. Install two (2) 6” X 12” X 1 1/4” “Bolt On” type zinc anodes with stainless steel studs in each sea chest. The starboard sea chest shall have a 6” schedule 80 pipe run to the main deck with a cam lock type fitting located near the deck house front bulkhead looking forward for the portable wash-down deck pump.

3.14 VENTILATION

3.14-1 VENTILATION - ENGINE ROOM

(a) Engine room ducts shall be constructed of 22 gauge galvanized sheet metal, with necessary area to allow air from the generator engine radiator fans to the main deck outlets. Main supply trunk shall be constructed as portion of main deck structure

(b) Two (2) intake ducts shall be installed to provide air into the machinery space when generators are not running.

(c) Two (2) exhaust ducts shall be provided to act as inlet ducts when generators are running or exhaust ducts when fans are running.

The trunks shall be sized to allow proper ventilation when the generators are running.

(d) Vent supply ducts shall each be fitted with vane-axial type marine fans.

(e) Fans shall be Hartzell, Model 44 18" diameter w/1 1/2 HP (TEFC) motor, 208 volt with approximately 3,000 CFM @ 1/2" SP.

3.14-2 MSD COMPARTMENT VENTILATION

(a) Provide and install a Hartzell fan 44 MDA-12-DG2, 3/4 HP, 208V, 3 PH, w/epoxy coated housing and trunk to provide ventilation in MSD compartment.

(b) Provide vent duct constructed of 22 gage galvanized sheet metal, with necessary transitions, adjustable terminals and screens.

(d) An exhaust trunk shall be provided on the opposite side of the barge to allow for proper ventilation.

(e) Both intake and exhaust trunks shall be incorporated into the deck house structure terminating above the handrailing on the top of the deckhouse.

(f) Intake terminals shall be fitted with removable mesh stainless steel insect screens with hardware cloth. The openings shall be located above the roof of the deck house with a return goose neck type fitting with cover. The duct size shall be minimum 12" x 12".

3.15 HEATING AND AIR CONDITIONING

(a) The living quarters shall be heated and cooling with a central unit with air over coil compressor unit located on the roof of the deck house structure.

(b) Heating shall be by heat strip units installed in the ducting sized to properly heat the living quarters with temperatures reaching a low of 32 degrees and a high of 95 degrees F.

(c) Cooling shall be approximately (5) tons capacity with a single blower unit in the mess area ducted to all rooms with an electronic control thermostat located in the hall way.

(d) Ducting shall be galvanized metal insulated on the inside with the main duct located in the hall area. There shall be drops to each room and an adjustable outlet louver. Dampers shall be installed in the main duct to allow proper balance of the air flow.

SECTION IV

CONSTRUCTION SPECIFICATIONS

PROJECT 16.71001

4.0 ELECTRICAL

4.1 GENERAL

(a) Installation and equipment shall be in accordance with the best commercial marine practice, and IEEE Standard #45. All cables and installation of cables shall meet current USCG regulations. Cables passing through watertight bulkheads or decks shall pass through a WT stuffing tube or approved transit box. All exterior penetrations shall be through stainless steel coupling or pipe as close to the electrical fixture as possible. All exterior fasteners shall be 316 stainless steel. All junction boxes shall be Pauluhn #532 or equal with gasketed cover. All hull interior watertight lighting fixtures and exterior watertight lighting fixtures shall be Pauluhn 729B with clear globe and 100 watt incandescent bulbs.

(b) All electric motors shall be TEFC type rated for 50 degrees C meeting the latest IEEE 45 standard. Motors of fractional hp to (1) hp are to be 120 volt single phase. Motors of 1 ½ hp to 3 hp are to be 208 volt single phase and 5 hp and greater are to be 208 volt 3 phase.

(b) All fractional hp starters shall be 120 volt with manual pushbutton starter including green running light. Start/stop pushbuttons may be located in starter cover unless specified otherwise. Starters of hp greater than 1 ½ are to be auto-magnetic type Square-D with start/stop pushbuttons in the cover with a green running light.

All starters located inside or protected from the weather shall be Nema 12 and all exterior exposed starters shall be Nema 4.

(d) All cables shall be single mounted in trays such as Kindorf with clips not stainless straps.

(e) All cables shall have embossed metal tags clamped at the distribution panel and at the entrance of electric controllers, fixtures or other electrical equipment.

4.2 GENERATORS

4.2-1 SHIPS SERVICE GENERATORS

(a) Provide and install two (2) Caterpillar 30 kW generators for 120/208 volt 3 phase 60 cycle service. (b) Each generator shall be provided with a control panel for mounting in the switchboard. Each panelboard shall include voltmeter, amp meter, frequency meter, rheostat and regulator on/off switch. Voltage regulator to be controlled from the switchboard.

(c) Engines shall have 12 volt starting with a engine mounted alternator for charging starting battery.

(d) Engines are to be provided with radiator cooling with fans directing air outward through the radiator to be discharge above the main deck by way of a metal duct as shown on drawing CB 140-2 Main Deck Arrangement.

(e) Engines shall be equipped with crankcase emission canisters.

(f) ACE series 630 spring mounts shall be provided for mounting between the unit C-channel base and the vessel's foundation.

(g) Fuel filters shall be duplex Racor USCG approved type with metal bowl mounted separate but adjacent to the generator.

(h) Contractor shall provide four (4) sets of manuals and parts books for the generator engines and generators.

4.3 BATTERIES AND CHARGERS

(a) The contractor shall furnish and install two (2) 12 volt battery chargers and two (2) 12 volt 8D batteries for starting the generator engines.

(b) Batteries shall be mounted in separate fiberglass boxes with a connecting switch so either battery can start either engine.

(c) Cables used to connect the batteries to the engine starters shall be proper size for starting amps and have compression type lugs at ends.

4.4 MAIN SWITCHBOARD

(a) The main switchboard shall meet IEEE 45 standards and be manufactured by Industrial Power Systems, Inc. of Jacksonville, FL.

(b) The switchboard may be wall mounted provided the front panel is hinged for easy access and all cables shall enter to top of the switchboard using watertight stuffing tubes with drip loops.

(c) The switchboard shall be configured for control of two (2) 30 kW 120/208 volt 3 phase 60 cycle generators for non-parallel operation.

(d) The switchboard shall have breakers for control of the two (2) generators, 200 amp shore power, vessel's fire pump, two (2) lighting panelboards and four (4) spare 20 amp 208 volt breakers.

(e) Contractor shall provide switchboard drawings for approval to NC DOT Ferry Division Engineering for approval prior to switchboard construction.

(f) The switchboard shall have necessary gauges and ground detection lights.

(h) The switchboard shall have a wood grab bar at the front and be painted gray in color.

4.5 PANELBOARDS

(a) There shall be two (2) 208/120 volt 3phase panelboards for power and lighting distribution on the vessel. The panelboards shall be SQ D 36 pole minimum with assorted 208 and 120 volt breakers with a minimum of four (4) spare breakers in each panel.

(b) One (1) panelboard shall be located in the machinery space for control of all pumps, lights, and receptacles below the main deck.

(c) One (1) panelboard shall be located in the living quarters for control of the HVAC, galley equipment, interior and exterior lights and receptacles.

4.6 GENERAL ALARM PANEL

(a) There shall be a 12 volt DC general alarm panel for control of two (2) alarm bells and two (2) contact makers. The system shall have its own 12 volt battery and charger.

(b) The panel shall be manufactured by J-Box Inc. with fuses for each circuit.

(c) The bell in the engine room shall have a relay for operation of a red revolving light.

(d) The bell in the quarters shall be located in the mess area with a contact maker located on the outside of the forward house bulkhead. The contact maker shall be housed in a watertight fiberglass box designed for easy access of the contact maker.

4.7 LIGHTING

4.7-1 GENERAL LIGHT

(a) Lighting in the machinery space and machinery space access area shall have incandescent light with a switch located near the access doors.

(b) Exterior watertight lights shall be 100 watt incandescent located around the exterior bulkheads of the deckhouse. Exterior lights shall be controlled from the lighting panel located in the deckhouse.

(c) The interior lights in the quarters shall be pauluhn fluorescent surface mounted type 2-20 watt fixtures. Each room or space shall have a control switch.

(d) Four (4) 500 watt quartz floodlights shall be located on the front on the deckhouse on stands above the handrails for lighting the forward deck area.

4.7-2 NAVIGATION LIGHTS

(a) There shall be two (2) stands located on the main deck forward for portable battery operated navigation lights stored on the tug. No other navigation light stands shall be required.

4.8 RECEPTACLES

(a) There shall be four (4) 120 volt watertight duplex receptacles in the machinery space located as directed by the owner.

(b) There shall be four (4) 120 volt watertight duplex receptacles located on the exterior of the deckhouse as directed by the owner.

(c) There shall be two (2) 120 volt watertight duplex receptacles located in the entrance area to the machinery space above the main deck as directed by the owner.

(d) There shall be four (4) 120 volt duplex receptacles located in each stateroom, galley and mess area.

(e) There shall be one (1) 120 volt GFI receptacles locate at each lavatory.

(f) There shall be two (2) 100 amp 208 volt 3 phase vessel power receptacles with plugs for the main deck area located as directed by the owner.

4.9 MACHINERY SPACE HEATERS

(a) There shall be two (2) Chromalox Model LUH-05-83 heaters located on the machinery space with one mounted on the aft bulkhead and the other mounted on the forward bulkhead.

4.10 EMERGENCY VENTILATION SHUTDOWN

(a) An emergency ventilation shutdown shall be located on the outside of the deckhouse just aft of the centerline exit door. The shutdown shall control the ventilation fans for the engine room and fuel transfer pump.

4.11 EMERGENCY GENERATOR SHUTDOWN

(a) Two (2) emergency pulls will be install to shutdown the generators in case of fire in the machinery space. These pull cables will be located near the ventilation shutdown.

4.12 FIRE ALARM SYSTEM

(a) An emergency fire alarm system shall be installed to monitor fire and smoke in the machinery space. This alarm system shall consist of heat and smoke detectors in the machinery space over the generators an alarm siren and yellow revolving light shall be located on the deck house front at the handrails on centerline. This system shall operate on 12 volt DC power furnished by the general alarm battery.

SECTION V
CONSTRUCTION SPECIFICATIONS

PROJECT 16.71001

5.0 PAINING

5.1 GENERAL

(a) All surface preparation and painting shall be in accordance with Ameron/Devoe Marine Coating Company and its inspector. All surface preparation and painting shall be inspected by the paint manufacturers representative before coating and afterwards to assure that the paint is applied properly. Reports shall be prepared and signed by the shipyard and paint representative when each area or tank is coated. The report shall include date, time, weather conditions, wet and dry mills of paint and type paint applied. The contractor may use pre-construction primer if the paint representative agrees to the process and material. All exterior steel shall have pre-construction primer removed and an approved paint system applied.

5.2 PAINT SCHEDULE

5.2-1 HULL EXTERIOR BELOW WL

- (a) Apply Devran 230 as specified by paint manufacturer.
- (b) Finish with Devran 214 anti-foul as specified by paint manufacturer.

5.2-2 HULL EXTERIOR ABOVE WL TO DECK

- (a) Apply Devran 230 as specified by paint manufacturer
- (b) Finish with Devran 229 Black as specified by paint manufacturer.

5.2-3 MAIN DECK

- (a) Same as Hull Exterior

5.2-4 SUPERSTRUCTURE

- (a) Apply Devran 235 as specified by paint manufacture.
- (b) Finish with Devran 229 Beach Sand.

5.2-5 MACHINERY SPACE AND STORAGE AREA

- (a) Apply Devran 235 as specified by paint manufacturer.
- (b) Apply Devran 235 red to bilge area.
- (c) Finish with Devran 229 white above bilges and overhead.

5.2-6 VOIDS

- (a) Apply Devran 235 as specified by paint manufacturer
- (b) Finish with gray coat

5.2-7 POTABLE WATER TANKS

- (a) Apply Devran 233 as specified by paint manufacturer
- (b) Finish with Devran 233 white and ventilate for seven (7) days.

5.2-8 BALLAST TANKS

- (a) Same as potable water

5.2-9 FUEL TANKS

- (a) Coat interior with mineral oil prior to shipment.

5.2-10 LABELS

- (a) Ship's name, hailing port and draft marks are to be painted white.
- (b) Install NC DOT logo on house side with 316 stainless steel studs and nuts.
- (c) Furnish and install builders plaque in Mess Area size 14" x 20 cast bronze with data provided by owner.

(d) Install owner furnished vessel name boards on deckhouse hand railing with 316 stainless steel clips and screws.

(e) All life saving equipment shall be labeled with vessel name in 1" Roman style letters.

(f) Label fire stations to match fire plan.

(g) Provide safety and pollution placards around vessel as required by USCG.

(h) Piping systems shall be labeled with paint color bands per owner. All valve handles shall be painted with corresponding colors. Arrows shall indicate flow of system.

5.3 ANODES

(a) Provide and install twenty (22#) weld strap type anodes to the vessel bottom as directed by the owner's representative.

SECTION VI

CONSTRUCTION SPECIFICATIONS

PROJECT 16.71001

6.0 TEST AND INSPECTIONS

6.1 TEST

(a) Owner shall witness all test and inspections unless otherwise authorized by him in writing.

(b) All test and inspections shall be recorded on form authorized by owner and furnished in duplicate upon delivery of vessel.

6.2 WELDING

(a) All welding shall be per USCG requirements by approved welders and procedures.

(b) Testing of main butts will be required by X-Ray test with four (4) shots per butt. Any failures will require rework of tested area. More than 20 percent failure will require additional test shots.

6.3 TANKS, DOORS AND PIPING

(a) All tanks shall be tested using 1.5 psi using soap solution to verify boundary integrity.

(b) All deckhouse boundaries shall be tested using fire hose with 50 psi pressure.

(c) All watertight doors will be tested using fire house after chalk test.

(d) Piping systems shall be test to 1.5 times working pressure using water.

(e) Record Fire Pump pressure and flow with pitot tube.

6.4 ELECTRICAL

- (a) All wiring to be tested for resistance and recorded.
- (b) All motors shall have their amp loads recorded for a baseline.
- (c) All circuits shall be tested for polarity.
- (d) Generators shall be loaded with full vessel loads to verify electrical load analysis.
- (e) All machinery shall be run for eight (8) hours to verify pressures and data to be recorded.

6.5 CRANE

- (a) Verify crane by lifting certified water bags at Cherry Branch Facility in North Carolina.

Test will be performed at owners expense by crane manufacturer. List angles will be recorded and verified with information furnished by Marine Engineer.

6.6 STABILITY TEST

- (a) Stability test will be by owner.

6.7 DOCK TRIALS

- (a) Dock trials will be conducted after all equipment has been completely tested.
- (b) Dock trials will take place prior to owner's representative signs off vessel prior to contractor shipping vessel to owner. These test will become part of vessel's records and contractor will furnish three (3) sets to the contractor at delivery.
- (c) All equipment will have final test during dock trials.
- (d) Vessel's final inspection will occur at dock trials, therefore vessel must be complete in every respect.

6.8 ADMEASUREMENT

- (a) Contractor will pay for fees and furnish documentation to owner.

6.9 DRAWINGS AND MANUALS

(a) Contractor shall furnish as built plans and manuals for all equipment purchased under this contract specifications. Four (4) copies of manuals shall be furnished at time of vessel delivery. Two (2) copies of drawings and photos will be furnished on CD at time of delivery.

6.10 CERTIFICATES

- (a) Certificate of Admeasurement
- (b) Master Builder's Certificate
- (c) Certificate for portable fire extinguishers
- (d) Mill reports on steel plate
- (e) Potable water tank lab report
- (f) Caterpillar test reports on gensets

SECTION VII
CONSTRUCTION SPECIFICATIONS
PROJECT 16.71001

7.0 PAYMENT SCHEDULE

(a) The project payment schedule will be made using contractor's hull number to identify payments as follows, when each milestone is accomplished and approved by the owner's representative in writing:

1. Execution of contract and proof of equipment order.	20%
2. Keel Laying of on 40 foot section of vessel bottom.	20%
3. Completion of machinery and joiner work.	20%
4. Launching of vessel.	20%
5. Delivery of vessel to owner at Cherry Branch Facility in NC.	20%
	100%

SECTION VIII

CONSTRUCTION SPECIFICATIONS

PROJECT 16.71001

8.0 DRAWING SCHEDULE

<u>TITLE</u>	<u>DRAWING NUMBER</u>
OUTBOARD PROFILE	CB 140-1
MAIN DECK ARRANGEMENT	CB 140-2
HOLD PLAN	CB 140-3
MAIN DECK STRUCTURE	CB 140-4
SHELL STRUCTURE	CB 140 -5
TRANSVERSE STRUCTURE	CB 140-6

THE FOLLOWING PLANS WILL BE FURNISHED BY CONTRACTOR

<u>TITLE</u>	<u>DRAWING NUMBER</u>
TRANSVERSE FRAMES	CB 140 -7
TRANSVERSE BULKHEADS	CB 140-8
LONGITUDINAL STRUCTURE	CB 140-9
OUTFITTING AND HANDRAILS	CB 140-10
MACHINERY ARRANGEMENT	CB 140-11
BALLAST, FIRE & BILGE PIPING	CB 140-12
POTABLE, SANITARY & SEWAGE PIPING	CB 140-13
COMPRESSED AIR PIPING	CB 140-14
FUEL OIL PIPING	CB 140-15
EXHAUST PIPING	CB 140-16
ELECTRICAL ONE-LINE & PANELBOARDS	CB 140-17
208/120 VOLT WIRING LAYOUT	CB 140-18
MISC WIRING PLAN	CB 140-19

PROJECT 16.71001

NEW CONSTRUCTION CRANE BARGE

INSTRUCTIONS - Contractor shall complete each item below by inserting the appropriate value for each. Lump sum per vessel shall be equal to total of Individual Item Costs. Please use pen for completion. Complete lump sum price sheet.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>COST</u>
1.0	Working Drawings	\$ _____
2.0	Structure	\$ _____
3.0	Machinery	\$ _____
4.0	Electrical	\$ _____
5.0	Painting	\$ _____
6.0	Testing	\$ _____

PROJECT 16.71001

1. LUMP SUM BID

Amount to complete plans, construction, testing and delivery of one (1) CRANE BARGE in accordance with Plans and Specifications.

Lump Sum \$ _____

*** NOTE ***

All bidders shall specify, in the space provided below, the physical location of the construction facility which will be used for the construction of this project.

This information shall be used by the Board of Transportation if award be made to the Lowest Responsible Bidder. Any substitution of construction site after award of contract shall be approved by the Department. The Contractor shall submit any request for substitution through the Inspector, and the request must provide a valid basis or reason for proposed substitution.

FACILITY LOCATION

PROJECT 16.71001

All bidders must complete the following information for the use of the Board of Transportation in considering unknown work, if any, contained in Part VII of the specifications for negotiation of increases or decreases.

LABOR AND MATERIALS

PER HOUR

- a. Price of Chipper \$ _____
- b. Price of Shipfitter \$ _____
- c. Price of Machinist \$ _____
- d. Price of Carpenter \$ _____
- e. Price of Blacksmith \$ _____
- f. Price of Electrician \$ _____
- g. Price of Rigger \$ _____
- h. Price of Patternmaker \$ _____
- I. Price of Gas Cutter \$ _____
- j. Price of Coppersmith \$ _____
- k. Price of Pipefitter \$ _____
- l. Price of Boilermaker \$ _____
- m. Price of Welder \$ _____
- n. Price of Sheetmetal Worker \$ _____
- o. Price of Ship Joiner \$ _____
- p. Price of Painter \$ _____
- q. Price of Helper (All Trades) \$ _____
- r. Price of Labor \$ _____
- s. Price of Lagger \$ _____

- | | |
|--------------------------------------|------------------------|
| t. Crane Service (To 5 Tons) | \$ _____ |
| u. Crane Service (5 to 25 Tons) | \$ _____ |
| v. Shotblasting (Equipment in Place) | \$ _____
per sq.ft. |
| w. Shotwashing (Equipment in Place) | \$ _____
per sq.ft. |
| x. Welding (per linear ft/pass) | \$ _____ |
| y. Galvanizing (Hot Dip Process) | \$ _____ |

The price charged as itemized opposite each of the above listed artificers will, except as noted, include the cost of all materials and tools such as gas, electricity, heat, compressed air, torches, air hammers and their appurtenances, forges, welding equipment, welding iron; and all other materials normally employed by artificers in performing operations under their trades under modern conditions, but will exclude the cost of any other materials actually used by the artificers in these processes. When welding is performed, the required number of passes over one (1) foot of seam shall constitute one (1) linear welded foot.

Materials used in work, if purchased from the Contractor, shall be priced at his invoiced cost, plus 15%.

*AWARD LIMITS ON MULTIPLE PROJECTS

It is the desire of the Bidder to be awarded contracts, the value of

which will not exceed a total of \$ _____, for those projects indicated below on which bids are being opened on the same date as shown in the Proposal Form. Individual projects shall be indicated by placing the contract number and county in the appropriate place below. Projects not selected will not be subject to an award limit.

_____	_____
(Contract Number)	(County)
_____	_____
(Contract Number)	(County)
_____	_____
(Contract Number)	(County)
_____	_____
(Contract Number)	(County)
_____	_____
(Contract Number)	(County)
_____	_____
(Contract Number)	(County)

*If a Bidder desires to limit the total amount of work awarded to him in this letting, he shall state such limit in the space provided above in the second line of this form.

It is agreed that in the event that I am (we are) the low Bidder(s) on indicated projects, the total value of which is more that the above stipulated award limits, the Board of Transportation will award me (us) projects from among those indicated which have a total value not exceeding the award limit and which will result in the lowest total bids to the Department of Transportation.

**Signature of Authorized Person

**Only those persons authorized to sign bids under the provisions of Article 102-8, Item 7, shall be authorized to sign this form.

12/21/99

EXECUTION OF BID, NONCOLLUSION AFFIDAVIT, AND DEBARMENT CERTIFICATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of "Status" under penalty of perjury under the laws of the United States in accordance with the Debarment Certification included elsewhere in the proposal form, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

SIGNATURE OF CONTRACTOR
(If a corporation uses this sheet)

(Print full name of corporation)

(Address as Prequalified)

Attest _____
(Secretary) (Assistant Secretary)
Delete inappropriate title

By _____
(President) (Vice President)
(Asst. Vice President)
Delete inappropriate title

Print Signer's Name

Print Signer's Name

CORPORATE SEAL

NOTE - AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

_____ day of _____, 20__.

(Signature of Notary Public)

NOTARY SEAL:

of _____ County.

State of _____.

My Commission Expires: _____

EXECUTION OF BID, NONCOLLUSION AFFIDAVIT, AND DEBARMENT CERTIFICATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of "Status" under penalty of perjury under the laws of the United States in accordance with the Debarment Certification included elsewhere in the proposal form, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

SIGNATURE OF CONTRACTOR

(If a joint venture, use this sheet)

Instructions to Bidders: On Line (1), print the name of each contractor. On Line (2), print the name of one of the joint venturers and execute below in the appropriate manner and furnish in the following lines all information required by Article 102-8 of the Specifications. On Line (3), print the name of the other joint venturer and execute below in the appropriate manner and furnish all information required by said article of the Specifications. For correct form of execution and information required for execution of this sheet by an individual, see Signature Sheets 3 and 4; for a corporation, see Signature Sheet 1; and for a partnership, see Signature Sheet 5.

(1) _____ and _____
A Joint Venture

(2) _____ (Seal)
(Name of Contractor)

Witness or Attest By _____

Print Signer's Name Print Signer's Name
If a corporation, affix corporate seal:

and
(3) _____ (Seal)
(Name of Contractor)

(Address as Prequalified)

Witness or Attest By _____

Print Signer's Name Print Signer's Name
If a corporation, affix corporate seal:

NOTE - AFFIDAVIT MUST BE NOTARIZED For Line (2) NOTE - AFFIDAVIT MUST BE NOTARIZED For Line (3)

Subscribed and sworn to before me

Subscribed and sworn to before me

this the ____ day of _____, 20__.

this the ____ day of _____, 20__.

(Signature of Notary Public & Seal)

(Signature of Notary Public & Seal)

of _____ County.

of _____ County.

State of _____.

State of _____.

My Commission Expires: _____.

My Commission Expires _____.

EXECUTION OF BID, NONCOLLUSION AFFIDAVIT, AND DEBARMENT CERTIFICATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of "Status" under penalty of perjury under the laws of the United States in accordance with the Debarment Certification included elsewhere in the proposal form, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

SIGNATURE OF CONTRACTOR

(If an individual doing business under a firm name, use this sheet)

Name of Contractor _____ trading
(Print individual name)

Witness

and doing business as _____
(Print firm name)

Print Signer's Name

(Address as Prequalified)

Signature of Contractor _____
(Individually)

Print Signer's Name

NOTE - AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the _____ day of _____, 20__.

NOTARY SEAL

(Signature of Notary Public)

of _____ County.

State of _____.

My Commission Expires: _____

12/21/99

EXECUTION OF BID, NONCOLLUSION AFFIDAVIT, AND DEBARMENT CERTIFICATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of "Status" under penalty of perjury under the laws of the United States in accordance with the Debarment Certification included elsewhere in the proposal form, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

SIGNATURE OF CONTRACTOR

(If an individual doing business in his own name, use this sheet)

Name of Contractor _____
(Print)

(Address as Prequalified)

Witness

Signature of Contractor _____
(Individually)

Print Signer's Name

Print Signer's Name

NOTE - AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the _____ day of _____, 20__.

NOTARY SEAL

(Signature of Notary Public)

of _____ County.

State of _____.

My Commission Expires: _____

EXECUTION OF BID, NONCOLLUSION AFFIDAVIT, AND DEBARMENT CERTIFICATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid, and that the bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the bidder's certification of "Status" under penalty of perjury under the laws of the United States in accordance with the Debarment Certification included elsewhere in the proposal form, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

SIGNATURE OF CONTRACTOR
(If a partnership, use this sheet)

(Print Name of Partnership)

(Address as Prequalified)

_____ By _____
Witness Partner

_____ _____
Print Signer's Name Print Signer's Name

NOTE - AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the
____ day of _____, 20__.

NOTARY SEAL

(Signature of Notary Public)

of _____ County.

State of _____.

My Commission Expires: _____

EXECUTION OF BID, NONCOLLUSION AFFIDAVIT, AND DEBARMENT CERTIFICATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of "Status" under penalty of perjury under the laws of the United States in accordance with the Debarment Certification included elsewhere in the proposal form, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

SIGNATURE OF CONTRACTOR
(Limited Liability Company, use this sheet)

Name of Contractor _____
(Print firm name)

(Address as Prequalified)

Signature of Manager _____
(Individually)

Print Signer's Name

NOTE - AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the
_____ day of _____, 20__.

NOTARY SEAL

(Signature of Notary Public)

of _____ County.

State of _____.

My Commission Expires: _____

C201519
Carteret

2/16/99

Contract No: C201519

County: Carteret

ACCEPTED BY THE
DEPARTMENT OF TRANSPORTATION

Contract Officer

Date

Execution of Contract and Bonds
Approved as to Form:

Attorney General

DEBARMENT CERTIFICATION OF BIDDERS

Instructions & conditions for certification

1. By signing and submitting this proposal, the bidder is providing the certification set out below.
2. The inability of a bidder to provide the certification required below will not necessarily result in denial of participation in this contract. If the certification is not provided, the bidder must submit an explanation (exception) of why it cannot provide the certification set out below. The certification or explanation (exception) will be considered in connection with the Department's determination whether to award the contract. However, failure of the prospective bidder to furnish a certification or an explanation (exception) may be grounds for rejection of the bid.
3. The certification in this provision is a material representation of fact upon which reliance is placed when the Department determines whether or not to award the contract. If it is later determined that the bidder knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the Department may terminate this contract for cause of default.
4. The prospective bidder shall provide immediate written notice to the Department if at any time the bidder learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
6. The bidder agrees by submitting this bid that, should the contract be awarded, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this contract, unless authorized by the Department.
7. The prospective bidder further agrees by submitting this proposal that it will include the Federal-Aid Provision titled "Required Contract Provisions Federal-Aid Construction Contract" (Form FHWA PR 1273) provided by the Department, without subsequent modification, in all lower tier covered transactions.

C201519

Carteret

8. The prospective bidder may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals.
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if the successful bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the Department may terminate this transaction for cause of default.

DEBARMENT CERTIFICATION

The bidder certifies to the best of its knowledge and belief, that it and its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal 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 public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Where the prospective bidder is unable to certify to any of the statements in this certification, it shall attach an explanation to this proposal.

IF AN EXPLANATION, AS PROVIDED IN THE ABOVE DEBARMENT CERTIFICATION, HAS BEEN ATTACHED TO THE PROPOSAL, PLEASE CHECK THE BOX SHOWN BELOW:

An explanation has been attached to the proposal.

