

## INVITATION FOR SEALED BID

**BID 02-717**

**Description: DIVE TRAILER  
Department: PUBLIC WORKS  
NIGP Commodity Code(s): 070-84-00-000-0**

**Total pages including this page is 25**

**NOTE: FAXED BIDS WILL NOT BE ACCEPTED.**

### **Important Instruction - Read Carefully:**

**If you have obtained these bid specifications from either of:  
City of Tulsa's Fax-on-Demand (918-596-1171) or  
City of Tulsa's Website : [www.cityoftulsapurchasing.org](http://www.cityoftulsapurchasing.org)**

**you must notify the buyer PATRICIA CUMMINGS of your intent to bid  
by e-mail <mailto:pcummings@ci.tulsa.ok.us> in order to receive addenda. The buyer  
will always acknowledge your e-mail for your records. All addenda  
will be posted on fax-on-demand and the website.**

## TABLE OF CONTENTS

**Pay special attention to those pages with a reference to the following notes:**

**Note #1: Signature of an authorized agent required**

**Note #2: Signature of an authorized agent and notary required**

Table of Contents		2
Invitation for Sealed Bid	( Note #1 )	3
General Terms and Conditions		4
Interest Affidavit	( Note #2 )	5
Bidder Affidavit	( Note #2 )	6
Contractor Information Sheet		7
Summary Price Sheet		8
Specifications		9-12
Technical Specifications		13-25

**Your bid response should follow the same format listed above plus any additional information requested in the body of the bid invitation.**

**INVITATION FOR SEALED BIDS  
TO  
City of Tulsa**

200 CIVIC CENTER, ROOM 109, TULSA, OKLAHOMA 74103

Bid number and date of bid opening must appear on the lower  
left outside corner of bid envelopes and all related containers.

**DATE OF OPENING:** November 21, 2002

**BID NUMBER:** 02-717

**BID MUST BE IN THE CITY CLERK'S OFFICE AT THE ABOVE ADDRESS BY 5:00 P.M. THE DAY PRECEDING THE "DATE OF OPENING" SHOWN ABOVE.**

**BIDS WILL BE OPENED AT 8:30 A.M. IN THE CITY COUNCIL ROOM ON THE DAY SPECIFIED UNDER "DATE OF OPENING."**

**PUBLISHED IN THE TULSA DAILY COMMERCE AND LEGAL NEWS:** October 31, 2002

Bid must be accompanied by bidder's bond, cashier's check or certified check in the amount of: \$ 1,000.00

PLEASE READ TERMS AND CONDITIONS ON THE NEXT PAGE BEFORE COMPLETING BID DOCUMENTS

\*\*\*\*\* **THE FOLLOWING SECTION MUST BE COMPLETED BY BIDDER** \*\*\*\*\*

Delivery will be made in not more than \_\_\_\_\_ days after receipt of order.

Payment terms \_\_\_\_\_ % \_\_\_\_\_ days.

City of Tulsa may increase quantity of order at the unit price bid for \_\_\_\_\_ days. (Bidder to Specify Days) I have examined the terms and specifications and the instructions to bidders herein and agree, provided I am awarded a contract, to provide the above described items for the sum shown in accordance with the terms and specifications stated herein. All deviations are in writing and attached hereto.

Enclosed is a [  ] BID BOND ; [  ] CASHIER'S CHECK; [  ] Certified Check in the amount of \$ 1,000.00, which I agree the City of Tulsa may retain as liquidated damages in the event of my failure to comply with the terms of this bid.

**MUST BE SIGNED BY AUTHORIZED AGENT TO BE VALID**

FIRM NAME \_\_\_\_\_ by \_\_\_\_\_

SIGNATURE OF AUTHORIZED AGENT

STREET \_\_\_\_\_ TITLE \_\_\_\_\_

CITY STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_ PHONE NUMBER \_\_\_\_\_ DATE \_\_\_\_\_

## GENERAL TERMS AND CONDITIONS OF SEALED BIDS

THESE ITEMS APPLY TO AND BECOME A PART OF THE BID.

**NO EXCEPTIONS TO THESE TERMS & CONDITIONS WILL BE CONSIDERED.**

1. **BIDS MUST BE SUBMITTED ON THIS FORM ONLY INCLUDING A SIGNATURE OF AN AUTHORIZED AGENT.** Each bid shall be placed in a separate envelope. Be sure envelope is completely and properly identified and sealed, showing the bid number and date in the lower left hand corner. Bids must be time stamped in the office of the City Clerk by 5:00 P.M. on the day before date of opening.
2. No bidder may withdraw his proposal for a period of thirty (30) days after the date and hour set for the opening of bids.
3. All prices shall be quoted F.O.B. Tulsa, Oklahoma, and delivery to City of Tulsa location shall be without additional charge.
4. The bidder shall attach the manufacturer's name of the equipment or material to be furnished, type, model numbers, manufacturer's descriptive bulletins and specifications. All guarantees and warranties should be clearly stated. This data shall be in sufficient detail to describe accurately the equipment or material to be furnished. Manufacturer's specifications, in respect to the successful bidder, shall be considered as part of his contract with the City of Tulsa.
5. The bidder shall show in the proposal both the unit prices and total amount, where required, of each item listed. In the event of error or discrepancy in the mathematics, the unit prices shall prevail.
6. Any exceptions or deviations from written specifications shall be shown in writing and attached to the bid form.
7. Each bidder agrees to comply with the terms of Title 5, Chapter 1, of Tulsa, Oklahoma Charter and revised ordinances relating to equal employment opportunity.
8. **THE ENCLOSED FORMS REGARDING NON-COLLUSION AND FINANCIAL INTEREST MUST BE SIGNED, NOTARIZED, AND RETURNED WITH THE BID.**
9. The City of Tulsa reserves the right to reject any and all bids, to waive any technicalities in the bidding, and to award each item to different bidders or all items to a single bidder.
10. All bids must be accompanied by bidders bond, cash, certified or cashier's check in the amount shown on the face of the bid form. This amount shall be retained by the City of Tulsa as liquidated damages in the event the successful bidder (or bidders) fails to execute a contract, if required. The bidder agrees that said amount is presumed to be the damages sustained by the City due to the impracticability and extreme difficulty in fixing the actual damages. The office of the City Clerk will return the bid deposits to the unsuccessful bidders, after a contract has been awarded or all bids have been rejected.
11. In the event cash discounts are offered by the bidder, the discount date shall begin with the date of invoice, the date of receipt of all material covered by the purchase order, or the date of receipt by the City of Tulsa of the original copy of the purchase order with properly executed Affidavit of Claimant, whichever is the later date.
12. Direct purchase of certain items of equipment or material by the City of Tulsa is exempt from Federal Excise Tax and Oklahoma Sales Tax. In such cases the bidder shall quote prices that do not include Federal Excise Tax and Oklahoma Sales Tax. The City of Tulsa will furnish executed exemption certificates upon presentation by the bidder at the time of purchase.
13. Bid must show number of days required for delivery under normal conditions. Failure to state delivery time obligates bidder to complete delivery in fourteen (14) calendar days. Unrealistically short or long delivery promises may cause bid to be disregarded. Contractor must keep Purchasing Department advised at all times of status of order. Default in promised delivery or failure to meet specifications authorizes the Purchasing Agent to purchase supplies elsewhere and charge full increase of cost and handling to defaulting contractor. Consistent failure to meet delivery promises without valid reason may cause removal from bid list.
14. Bidder agrees to defend and save City of Tulsa from and against all demands, claims, suits, costs, expenses, damages and judgments based upon infringement of any patent relating to goods specified in this order or the ordinary use or operation of such goods by City or use or operation of such goods in accordance with bidders direction.
15. If the bid requires a written contract, the successful bidder shall execute a written contract with the City of Tulsa and return the required bonds and insurance certificates within ten (10) days after submission of contracts to said bidder by the City.

# INTEREST AFFIDAVIT

STATE OF \_\_\_\_\_ }  
                                  } ss  
COUNTY OF \_\_\_\_\_ }

\_\_\_\_\_, of lawful age, being first duly sworn, states that s(he) is the agent authorized by the bidder to submit the attached bid. Affiant further states that no officer or employee of the City of Tulsa either directly or indirectly, owns a twenty-five percent (25%) interest in the bidder's business or such a percentage which constitutes a controlling interest. Affiant further states that the following officers and/or employees of the City of Tulsa have some direct or indirect interest in the bidder's business:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_

NOTARY PUBLIC SIGNATURE

My Commission Expires:

\_\_\_\_\_

**The Interest Affidavit must be completed, signed by an authorized agent, and notarized.**

# BIDDER AFFIDAVIT - TITLE 74 O.S. (1974 SUPP.) 85.22-85.25

STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_\_

\_\_\_\_\_, of lawful age, being first duly sworn on oath says

**Authorized Agent**

1. (s)he is the duly authorized agent of \_\_\_\_\_, the bidder submitting the competitive bid which is attached to this statement, for the purpose of certifying the facts pertaining to the existence of collusion among bidders and between bidders and municipal officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to the bid to which this statement is attached.
2. (s)he is fully aware of the facts and circumstances surrounding the making of the bid to which this statement is attached and has been personally and directly involved in the proceedings leading to the submission of such bid; and
3. neither the bidder nor anyone subject to the bidder's direction or control has been a party;
  - a. to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding,
  - b. to any collusion with any municipal official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract, nor
  - c. in any discussions between bidders and any municipal official concerning exchange of money or other thing of value for special consideration in the letting of a contract.

\_\_\_\_\_  
SIGNATURE OF AUTHORIZED AGENT

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
MY COMMISSION EXPIRES

**The Bidder Affidavit must be completed, signed by an authorized agent, and notarized.**

# CONTRACTOR/BIDDER INFORMATION SHEET

To be completed by all Bidders  
For Contracts with the City of Tulsa  
(Please print or type)

Project No. or Description \_\_\_\_\_

\_\_\_\_\_

Full Name of Bidder \_\_\_\_\_

Legal Identity  
(Corporation, Partnership,  
Individual, etc.) \_\_\_\_\_

Person Authorized to Contract \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone No. \_\_\_\_\_

FAX No. \_\_\_\_\_

Taxpayer Identification Number \_\_\_\_\_

Contact Person \_\_\_\_\_

Phone No. \_\_\_\_\_

Fax No. \_\_\_\_\_

E-mail address \_\_\_\_\_

Webpage Address \_\_\_\_\_

# Price Sheet Summary

Vendor Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**You will be able to obtain a copy of the Bid Summary on the City of Tulsa's Purchase-Net Fax-on-Demand and Website shortly after bid opening.**

**BID 02-717**

## **DIVE TRAILER PUBLIC WORKS DEPARTMENT**

### **PRICING**

BIDDER AGREES TO FURNISH THE FOLLOWING IN ACCORDANCE WITH THE MINIMUM BID SPECIFICATIONS AT THE PRICES SHOWN:

ONE (1) OR MORE **DIVE TRAILER(S)**:

\$ \_\_\_\_\_ EACH

MAKE AND  
MODEL: \_\_\_\_\_

## **BID 02-717 DIVE TRAILER**

### **INTENT:**

THE INTENT OF THESE SPECIFICATIONS IS TO SET MINIMUM REQUIREMENTS, NOT TO OTHERWISE LIMIT BIDDING FOR THE SUPPLY OF **ONE (1))** OR MORE **DIVE TRAILER(S)** FOR THE CITY OF TULSA'S PUBLIC WORKS DEPARTMENT.

INASMUCH AS SOME DESIGNS OF EQUIPMENT VARY AMONG DIFFERENT MANUFACTURERS, THE CITY MAY ACCEPT BIDS ON EQUIPMENT WITH MINOR DEVIATIONS TO THE WRITTEN SPECIFICATIONS. GENERALLY, A MINOR DEVIATION IS DEFINED AS A DEVIATION WHICH DOES NOT: (A) MATERIALLY AFFECT THE ABILITY OF THE PRODUCT TO ACHIEVE OR ACCOMPLISH A NECESSARY FUNCTION OR TASK IN THE MANNER REQUIRED BY THE SPECIFICATIONS; (B) COMPROMISE THE SAFETY OF THE USER THEREOF; AND, PRODUCE HIGHER LATENT OR PATENT COSTS TO THE CITY IN ANY OF A MULTIPLICITY OF WAYS. THE CITY OF TULSA SPECIFICALLY RESERVES THE RIGHT TO MAKE THE JUDGMENT CONCERNING WHAT IS OR IS NOT A MINOR DEVIATION AND TO AWARD THE BIDDER (S) WHOSE BID(S) BEST SUIT THE CITY'S NEED FOR THE PRODUCT BEING PURCHASED.

### **GENERAL:**

**BIDDERS SHALL SUBMIT ONE(1) COMPLETE ORIGINAL AND TWO (2) COMPLETE COPIES OF THE BID AND ALL DATA.**

ALL EQUIPMENT AND/OR SUPPLIES LISTED IN THIS BID SHALL BE NEW, UNUSED, FIRST LINE QUALITY, MANUFACTURER'S LATEST MODEL AND READY FOR IMMEDIATE SERVICE.

THE MANUFACTURER SHALL CONFORM TO THE BEST PRACTICE KNOWN TO THE INDUSTRY IN DESIGN, QUALITY OF WORKMANSHIP AND MATERIAL, AND BE SUBJECT TO THE SPECIFICATIONS IN FULL. SHOULD THE MANUFACTURER'S CURRENT PUBLISHED DATA OR SPECIFICATIONS EXCEED THE CITY'S SPECIFICATIONS, THEY SHALL BE CONSIDERED MINIMUM AND FURNISHED.

### **PRICING TERMS:**

PRICE(S) BID SHALL BE FIRM FOR A MINIMUM PERIOD OF NINETY (90) DAYS FROM BID OPENING DATE.

**THE CITY WILL NOT ACCEPT BIDS BASED ON PROGRESSIVE PAYMENTS.**

PAYMENT WILL BE MADE IN APPROXIMATELY THIRTY (30) DAYS AFTER RECEIPT AND ACCEPTANCE OF VEHICLE(S) WHEN POSSIBLE.

**ADDENDA AND INTERPRETATIONS:**

IF IT BECOMES NECESSARY TO REVISE ANY PART OF THIS BID, A WRITTEN ADDENDUM WILL BE PROVIDED TO ALL THE BIDDERS. THE CITY OF TULSA IS NOT BOUND BY ANY ORAL REPRESENTATION, CLARIFICATIONS OR CHANGES MADE IN THE WRITTEN SPECIFICATIONS BY CITY OF TULSA EMPLOYEES UNLESS SUCH CLARIFICATION OR CHANGE IS PROVIDED TO BIDDERS IN WRITTEN ADDENDUM FORM FROM THE PURCHASING DIVISION.

**CONTRACT:**

THE SUCCESSFUL BIDDER WILL BE REQUIRED TO ENTER INTO CONTRACT WITH THE CITY IN ACCORDANCE WITH ITEM 15 OF THE **GENERAL TERMS AND CONDITIONS** AS PRINTED ON PAGE 4.

**BID BOND:**

A CERTIFIED OR CASHIER'S CHECK OR BIDDER'S SURETY BOND, IN THE SUM OF **\$1,000.00** WILL BE REQUIRED FROM EACH BIDDER TO BE RETAINED AS LIQUIDATED DAMAGES IN THE EVENT THE SUCCESSFUL BIDDER FAILS, NEGLECTS OR REFUSES TO ENTER INTO SAID CONTRACT AND FURNISH THE NECESSARY BONDS, INSURANCE CERTIFICATES, ETC., AS SPECIFIED, WITHIN TEN (10) DAYS FROM AND AFTER THE DATE THE CONTRACT DOCUMENT IS RECEIVED FROM THE CITY OF TULSA LEGAL DEPARTMENT.

**BONDS AND/OR EVIDENCE OF INSURANCE:**

EACH BOND OR INSURANCE CERTIFICATE **MUST BE IDENTIFIED WITH BID REQUEST NUMBER OF THIS BID SOLICITATION.**

**DESCRIPTIVE LITERATURE:**

EACH BIDDER IS REQUIRED TO FURNISH WITH THEIR BID, CATALOG CUTS AND/OR DESCRIPTIVE LITERATURE, PROPERLY LABELED WITH THE BID NUMBER AND BIDDER'S NAME, WITH FULL ILLUSTRATIONS AND DETAILED SPECIFICATIONS FOR EACH ITEM OFFERED AS EQUAL TO BRAND NAMES SPECIFIED. IN ADDITION, **ALL DIFFERENCES IN SPECIFICATIONS FROM THE SPECIFICATIONS STATED HEREIN MUST BE SO MARKED.** DESCRIPTIVE LITERATURE IS REQUIRED TO ESTABLISH, FOR THE PURPOSE OF BID EVALUATION AND AWARD, DETAILS OF THE PRODUCT(S) THE BIDDER PROPOSES TO FURNISH AS TO DESIGN, MATERIALS, METHOD OF MANUFACTURER, CONSTRUCTION, ASSEMBLY OR OPERATION, AS APPROPRIATE. **FAILURE TO SUBMIT THE DESCRIPTIVE LITERATURE MAY BE CAUSE FOR REJECTION OF YOUR BID.**

**AMERICANS WITH DISABILITIES ACT:**

THE CONTRACTOR SHALL TAKE THE NECESSARY ACTIONS TO ENSURE ITS FACILITIES AND EQUIPMENT ARE IN COMPLIANCE WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT. IT IS UNDERSTOOD THAT THE PROGRAM OF THE CONTRACTOR IS NOT A PROGRAM OR ACTIVITY OF THE CITY OF TULSA. THE CONTRACTOR AGREES THAT ITS PROGRAM OR ACTIVITY WILL COMPLY WITH THE REQUIREMENTS OF THE ADA. ANY COSTS OF SUCH COMPLIANCE WILL BE THE RESPONSIBILITY OF CONTRACTOR. UNDER NO CIRCUMSTANCES WILL CONTRACTOR CONDUCT ANY ACTIVITY WHICH IT DEEMS TO NOT BE IN COMPLIANCE WITH THE ADA.

## **EMPLOYMENT DISCRIMINATION BY CONTRACTOR PROHIBITED**

A. DURING THE PERFORMANCE OF THIS CONTRACT, THE CONTRACTOR AGREES AS FOLLOWS:

- (1) THE CONTRACTOR WILL NOT DISCRIMINATE AGAINST ANY EMPLOYEES OR APPLICANT FOR EMPLOYMENT BECAUSE OF RACE, RELIGION, COLOR, SEX OR NATIONAL ORIGIN, EXCEPT WHERE RELIGION, SEX OR NATIONAL ORIGIN IS A BONA FIDE OCCUPATIONAL QUALIFICATION REASONABLY NECESSARY TO THE NORMAL OPERATION OF THE CONTRACTOR. THE CONTRACTOR AGREES TO POST IN CONSPICUOUS PLACES, AVAILABLE TO EMPLOYEES AND APPLICANTS FOR EMPLOYMENT, NOTICES SETTING FORTH THE PROVISION OF THIS NONDISCRIMINATION CLAUSE.

## **AWARD OF BID:**

**THIS BID SHALL BE AWARDED TO THE VENDOR WHO MEETS THE CITY'S MINIMUM SPECIFICATIONS AND OFFERS THE LOWEST TOTAL COST TO THE CITY OF TULSA.** FURTHER, THE BID SHALL BE AWARDED TO THE FIRM WHOSE PROPOSAL IS RESPONSIVE TO THE BID AND IS MOST ADVANTAGEOUS TO THE CITY, CONSIDERING THE FACTORS IDENTIFIED IN THE BID AND SECTION 406E OF TITLE 6, THE PURCHASING ORDINANCE SET FORTH BELOW:

E. AWARD OF CONTRACT.

1. AUTHORITY OF MAYOR. THE MAYOR SHALL HAVE THE AUTHORITY TO AWARD CONTRACTS WITHIN THE PURVIEW OF THIS CHAPTER.

2. LOWEST SECURE BIDDER. CONTRACTS SHALL BE AWARDED TO THE LOWEST SECURE BIDDER MEETING SPECIFICATIONS. IN DETERMINING "LOWEST SECURE BIDDER", IN ADDITION TO PRICE, THE FOLLOWING FACTORS SHALL BE CONSIDERED:

A. THE ABILITY, CAPACITY AND SKILL OF THE BIDDER TO PERFORM THE CONTRACT OR PROVIDE THE SERVICE REQUIRED;

B. WHETHER THE BIDDER CAN PERFORM THE CONTRACT OR PROVIDE THE SERVICE PROMPTLY OR WITHIN THE TIME SPECIFIED, WITHOUT DELAY OR INTERFERENCE;

C. THE CHARACTER, INTEGRITY, REPUTATION, JUDGMENT, EXPERIENCE AND EFFICIENCY OF THE BIDDER;

D. THE QUALITY OF PERFORMANCE OF PREVIOUS CONTRACTS OR SERVICES;

E. THE PREVIOUS AND EXISTING COMPLIANCE BY THE BIDDER WITH LAWS AND ORDINANCES RELATING TO THE CONTRACT OR SERVICE;

F. THE SUFFICIENCY OF THE FINANCIAL RESOURCES AND ABILITY OF THE BIDDER TO PERFORM THE CONTRACT OR PROVIDE THE SERVICE;

G. THE QUALITY, AVAILABILITY AND ADAPTABILITY OF THE SUPPLIES OR CONTRACTUAL SERVICES TO THE PARTICULAR USE REQUIRED;

H. THE ABILITY OF THE BIDDER TO PROVIDE FUTURE MAINTENANCE AND SERVICE FOR THE USE OF THE SUBJECT OF THE CONTRACT, AND;

I. WHERE AN EARLIER DELIVERY DATE WOULD BE OF GREAT BENEFIT TO THE REQUISITIONING AGENCY, THE DATE AND TERMS OF DELIVERY MAY BE CONSIDERED IN THE BID AWARD, AND;

J. THE NUMBER AND SCOPE OF CONDITIONS ATTACHED TO THE BID.

K. IF A POINT SYSTEM HAS BEEN UTILIZED IN THE BID SPECIFICATIONS, THE NUMBER OF POINTS EARNED BY THE BIDDER.

Section 1:  
Item

Minimum Specifications

Section 2: Bidder's Column (Must be completed)

1. EQUIPMENT	CURRENT YEAR MODEL ENCLOSED 16' TRAILER. TO BE UTILIZED FOR A PORTABLE DIVING OPERATIONS TRAILER	<hr/> <hr/> <hr/> <hr/>
2. CAPACITY	5500 LB PAYLOAD 7700 LB GVWR 2070 CURB WEIGHT HITCH WEIGHT 10-15% OF CURB WEIGHT	<hr/> <hr/> <hr/> <hr/>
3. BOX CONSTRUCTION	7' INSIDE HEIGHT 78-3/4 HD VERTICAL POSTS ON 16" CENTERS MADE OF 4" TUBE STEEL	<hr/> <hr/> <hr/>
4. TRAILER LENGTHS	1) OUTSIDE BOX LENGTH -16' 2) OUTSIDE BOX WIDTH -7' 3) INTERIOR LENGTH -15'9" 4) INTERIOR WIDTH -6'9" 5) INTERIOR HEIGHT -7' 6) OVERALL LENGTH -21' (INCLUDES 5' TONGUE LENGTH) 7) OVERALL WIDTH -8'6" (INCLUDES FENDERS) 8) OVERALL HEIGHT - 8'10" 9) PLATFORM HEIGHT - 19" 10) HITCH BALL SIZE 2-5/16"	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
5. TRAILER CONSTRUCTION	1) 3-PIECE "A" FRAME 2 5/16" TOP MOUNT COUPLER W/LOCKING DOG ASSEMBLY. 2) 4"X2" RECTANGULAR STEEL TUBE MAIN RAILS W/EQUAL HEIGHT "C" SECTION CROSSMEMBERS AND SQUARE OUTRIGGERS (TONGUE) 3) EXTENTION OF "A" FRAME TONGUE SHALL USE MINIMUM OF 1/4" WALL TUBING.	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>











## **SPECIFICATIONS FOR TRAILER SAFETY CHAINS**

### **CLASS I, II, and III (not to exceed 5,000 lbs)**

(2) 314A 1/4" HOOK )1225021)	WLL=4,500 LBS - UL=18,000 LBS
(2) 1/4" CHAIN (ALLOY)	WLL=3,500 LBS - UL=14,000 LBS
(2) 337 1/4" CONN. LINK	WLL=3,500 LBS - UL=14,000 LBS
(4) S341 1/2" WELDLESS SLING LINKS	WLL=2,900 LBS - UL=17,400 LBS

### **CLASS IV (not to exceed 10,000 lbs)**

(2) 314A 3/8" HOOK	WLL=7,100 LBS - UL=28,400 LBS
(2) 3/8" CHAIN (ALLOY)	WLL=7,100 LBS - UL=28,400 LBS
(2) 337 3/8" CONN. LINK	WLL=6,600 LBS - UL=26,400 LBS
(4) S341 3/4" WELDLESS SLING LINKS	WLL=6,000 LBS - UL=36,000 LBS

### **CLASS V (not to exceed 30,000 lbs)**

(2) 314A 1/2" HOOK	WLL=12,000 LBS - UL=48,000 LBS
(2) 1/2" CHAIN (ALLOY)	WLL=12,000 LBS - UL=48,000 LBS
(2) 337 1/2" CONN. LINK	WLL=11,250 LBS - UL=45,000 LBS
(4) S341 1" WELDLESS SLING LINK	WLL=10,800 LBS - UL=64,800 LBS

### **Hook Detail**

All hooks will be Crosby Grade 8 Alloy Steel Latching Clevis Hooks, (heat treated), which meets the new NACM and proposed ASTM and Euronorm Standards for Grade 8 Chain fittings. The hooks are anti-fouling due to carefully designed contours and are individually tested at 2 1/2 times the working load limit, with certification packed with each hook. These hooks are also fatigue rated. (Domestic Only, Crosby or Equal and Certificate of Compliance Required).

### **Chain Detail**

All chain will be equal to Crosby Spectrum 8 Alloy Chain. Proof loaded at 2 1/2 times the Working Load Limit, and a minimum Ultimate Load of 4 times the Working Load Limit. Purchasing information, (Domestic Only, Crosby or Equal and Certificate of Compliance Required).

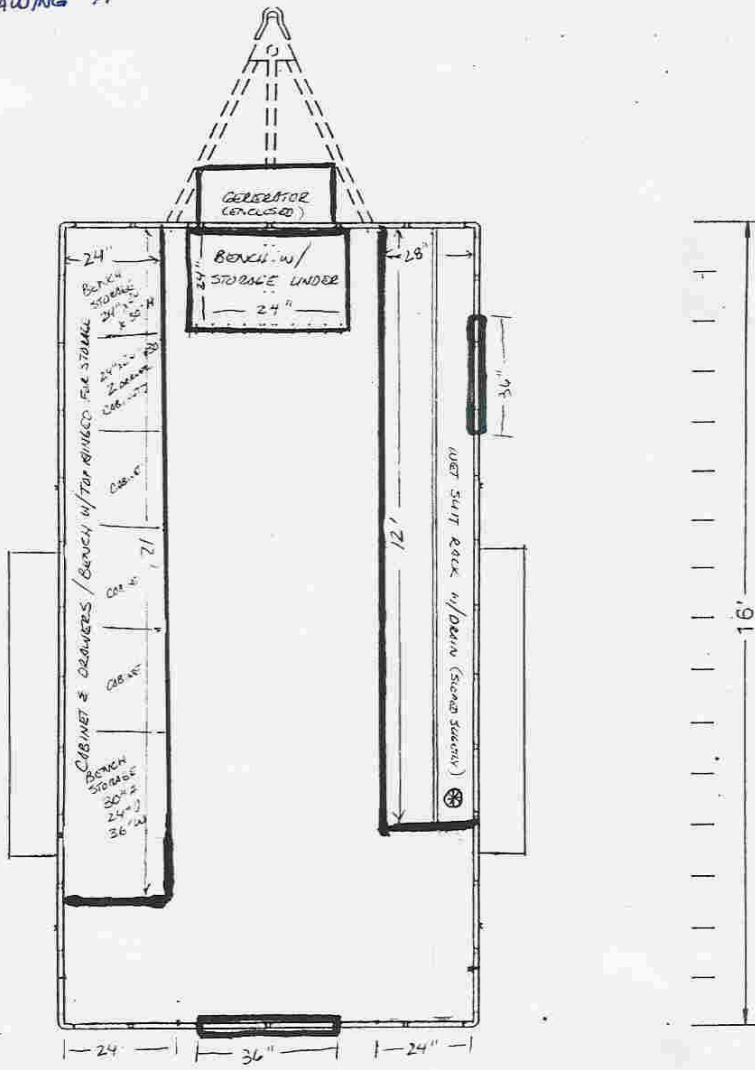
### **Connecting Link Detail**

Crosby Lok-A-Loy Alloy Connecting Link. Quenched and Tempered are individually Proof Tested Forged Alloy Steel. The Ultimate Load is 4 times the Working Load Limit. Purchasing information, (Domestic Only, Crosby or Equal and Certificate of Compliance Required).

### **Weldless Sling Links**

Crosby Forged Carbon Steel, Quenched and Tempered (If painted the paint must be removed before welding to trucks and trailers). Links are to be attached by means of a 2 1/2" wide by 12" long by 3/8" A36 steel strap welded to rear of vehicle. The Ultimate Load is 6 times the Working Load Limit. These links must be equal to the Crosby S341. Purchasing information (Domestic Only, Crosby or Equal and Certificate of Compliance Required).

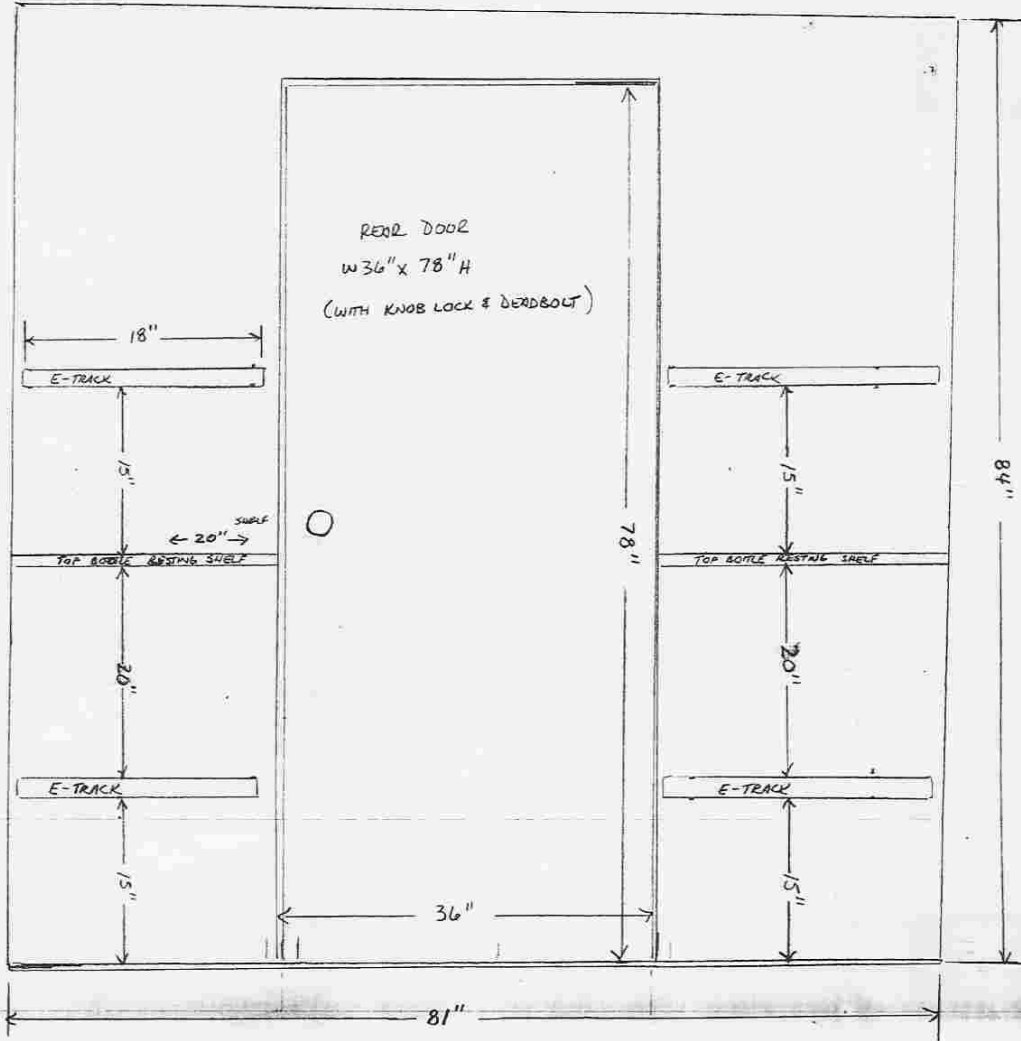
DRAWING "A"



7" wide

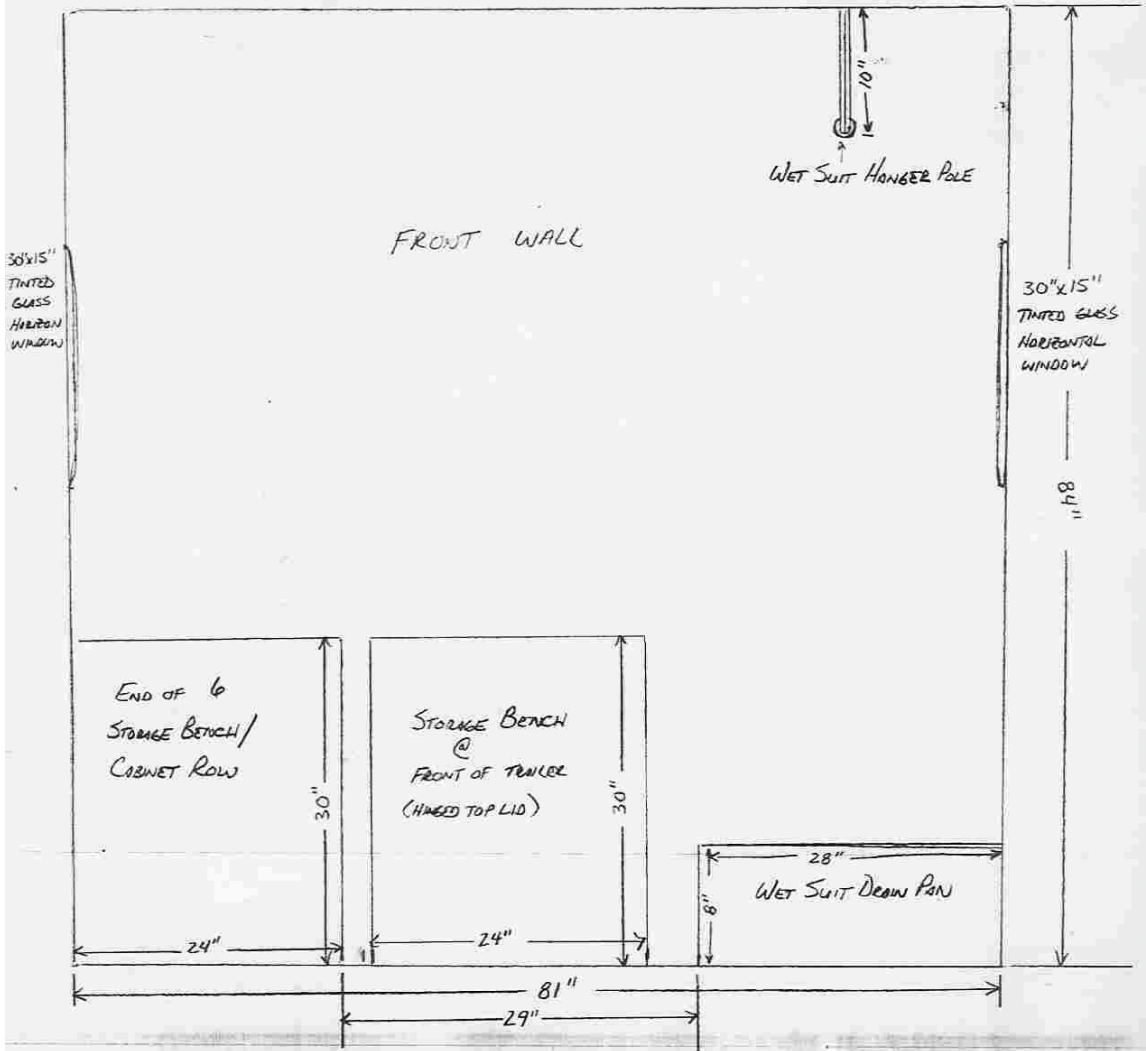
FROM FRONT OF TRAILER LOOKING AT BACK WALL (REAR OF TRAILER)

DRAWING "B"



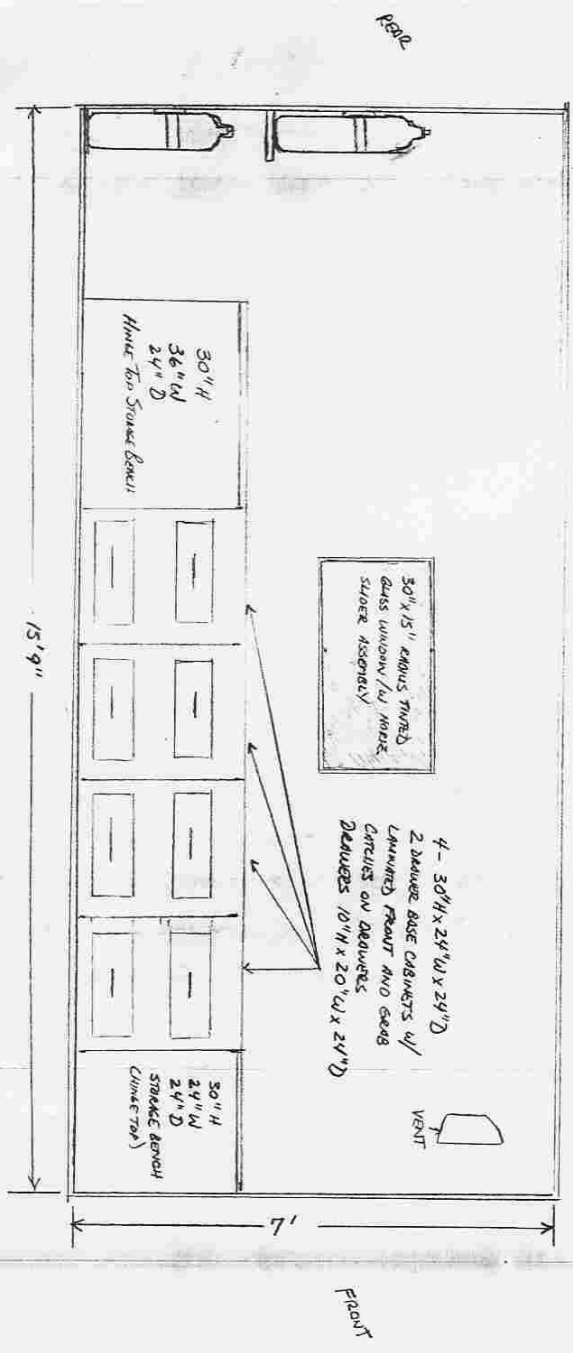
FROM REAR OF TRAILER LOOKING TO FRONT

DRAWING "C"



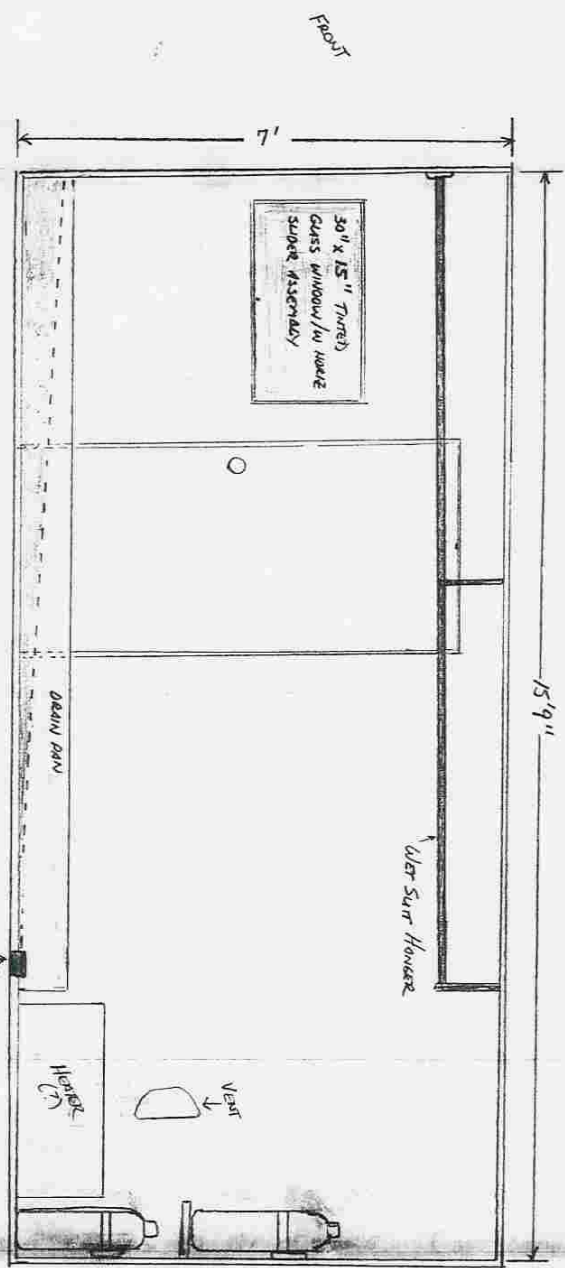
CAR VIEW VIEW OF LEFT SIDE OF TRAILER (LEFT FROM STANDING AT REAR LOOKING FORWARD)

Drawing "D"



Cut Away View of Right Side of Trailer (Client from Standing at Rear Looking Forward)

Drawing "E"



DEWAIN PAN 12' L x 28" W x 8" D SCREW TO STRUT 2" ABOVE TOP OF PAN  
 AT FRONT OF TRAILER 10' TO WITHIN 2' OF END OF PAN WHERE STAINLESS, HANG  
 OPERATED DEWAIN WILL BE LOCATED (CENTERED IN REARWARD OF DEWAIN (2' x 2')  
 ENTRANCE DEWAIN PAN ASSEMBLY TO BE SPACED WITH RIVETS LIVING AFTER  
 WHICH DEWAIN WILL BE INSTALLED AND SEALED.

**Trailer Safety Chain Specifications by Part**

**Hook Detail**

All hooks will be Crosby Grade 8 Alloy Steel Latching Clevis Hooks, (heat treated), which meets the new NACM and proposed ASTM and Euronorm Standards for Grade 8 Chain fittings. The hooks are anti-fouling due to carefully designed contours and are individually Proof Tested at 2 1/2 times the Working Load Limit, with certification, packed with each hook. These hooks are also fatigue rated. The Ultimate Load is 4 times the Working Load Limit. Crosby Part #S314A. (Domestic Only, Crosby or Equal and Certificate of Compliance Required).

**Chain Detail**

All Chain will be equal to Crosby Spectrum 8 Alloy Chain. Proof loaded a 2 1/2 times Working Load Limit, and a minimum Ultimate Load of 4 times the Working Load Limit. Purchasing information, (Domestic Only, Crosby or Equal and Certificate of Compliance Required).

**Connecting Link Detail**

Crosby Lok-A-Loy Alloy Connecting Link, Quenched and Tempered are individually Proof Tested Forged Alloy Steel. The Ultimate Load is 4 times the Working Load Limit. Purchasing information, (Domestic Only, Crosby or Equal and Certificate of Compliance Required).

**Weldless Sling Links**

Crosby Forged Carbon Steel, Quenched and Tempered. The Ultimate Load is 6 times the Working Load Limit. These links must be equal to the Crosby S341. Purchasing information (Domestic Only, Crosby or Equal and Certificate of Compliance Required).

**Containment Unit for Weldless Links**

The steel strips which will be made in accordance with Attachment "I" will contain the Weldless Sling Links to the trailer and pulling vehicle.

**Weldless Link Holding Device**

The weldless link is 1 inch in diameter. A steel strip will be heated and formed over a 1-1/4 inch round bar. The steel strip will then be placed over weldless link and welded on all three sides up to where the steel strip fits over weldless link. The weld strength should be a minimum of 60,000 pounds per square inch. The steel strip dimensions will be : 3/8 inch thick, 8 inches long and 2-1/2 inches wide and should be Grade: A36 material.

