

COUNTY OF MONMOUTH
STATE OF NEW JERSEY

FURNISH AND DELIVER CONSTRUCTION EQUIPMENT TRAINING SIMULATORS FOR THE
MONMOUTH COUNTY DIVISION OF PUBLIC WORKS F-94-2021

INCLUDES:

NOTICE TO BIDDERS
GENERAL CONDITIONS
EEO LANGUAGE
EEO QUESTIONNAIRE
BUSINESS REGISTRATION REQUIREMENTS
STATEMENT OF OWNERSHIP
IRAN DISCLOSURE FORM
AMERICANS WITH DISABILITIES ACT

NON-COLLUSION AFFIDAVIT
ADDENDUM ACKNOWLEDGEMENT
BID DOCUMENT CHECKLIST
REQUEST FOR BID
ADDITIONAL SPECIFICATIONS (if any)
SIGNATURE PAGE
ANTI-DISCRIMINATION IN EMPLOYMENT

AUTHORIZED: June 24, 2021

ADVERTISED: September 23, 2021

THOMAS A. ARNONE
DIRECTOR OF THE BOARD OF COUNTY COMMISSIONERS

MARION MASNICK
CLERK OF THE BOARD

TERI O'CONNOR
COUNTY ADMINISTRATOR

HELEN P. FIORE
DIRECTOR OF PURCHASING

NAME OF BIDDER: JESCO, INC

ADDRESS: 118 ST. NICHOLAS AVE, SOUTH PLAINFIELD, NJ 07080

Phone: 908-753-8080 **Fax:** 908-821-1400

PLEASE INCLUDE ONE (1) UNBOUND ORIGINAL BID WITH SIGNATURE(S) AND TWO COPIES

County of Monmouth

REQUEST FOR BID

----- This Is Not An Order -----



RFB# F-94-2021

**Monmouth County Purchasing
Hall of Records, 3rd Floor
1 East Main Street
Freehold, NJ 07728
(732) 431-7370 Fax (732) 431-7379**

Contact: Rebecca Szabo
732-431-7370 x7381

**FURNISH AND DELIVER CONSTRUCTION EQUIPMENT TRAINING SIMULATORS FOR THE
MONMOUTH COUNTY DIVISION OF PUBLIC WORKS**

RFB must be received no later than: October 6, 2021 10:30AM

For Delivery to: Public Works & Engineering, Public Works Complex
250 Center Street, Freehold, NJ 07728

Delivery Date: 90 DAYS ARO

| ITEM# | DESCRIPTION | QUANTITY/UNIT | UNIT PRICE | TOTAL PRICE |
|---------------|---|---------------|---------------------|--------------|
| 1 | FURNISH AND DELIVER CONSTRUCTION EQUIPMENT TRAINING SIMULATOR PACKAGE FOR THE MONMOUTH COUNTY DIVISION OF PUBLIC WORKS TO INCLUDE: THREE (3) SIMULATORS WITH FIVE (5) PROGRAMS IN EACH AS PER ATTACHED SPECIFICATIONS | 1 LS | \$229,508.00 | \$229,508.00 |
| TOTAL: | | | \$229,508.00 | |

COUNTY OF MONMOUTH
SPECIFICATIONS
Training Simulator, Construction Equipment

Intent:

It is the intent of this specification to describe and govern the purchase of Training Simulators. The complete units shall be 2019 or newer and of the latest design and be in current production at the time of the submission of the bid. No bid shall be considered unless the vendor submitting the bid can meet the conditions described in the specifications. The referenced model is for example only to depict minimum requirements for the type of equipment required by the County of Monmouth. All standard and optional equipment shall be Original Equipment Manufacturer's items, when available. **NO EXCEPTIONS**

General:

The successful bidder shall make available a **complete unit** for inspection and acceptance by the County of Monmouth **prior** to delivery of the balance of order. The pilot unit inspection shall take place at the Division of Fleet Services, Freehold, New Jersey. During the fabrication period of the unit, the County of Monmouth reserves the right to make interval inspections, as it deems necessary. A prefabrication meeting shall be scheduled by the County of Monmouth after receipt of purchase order.

If a bidder is submitting an alternate to what is referenced in the specifications, his/her proposal **must** be accompanied by descriptive literature, marked to indicate the exact items to be furnished and detailed engineering drawing documentation of the same. **Failure to supply information requested with bid will result in rejection of bid.** The unit must meet all current OSHA, ANSI, ASME, ASTM, ASA, NEC, NEMA, National Traffic and Motor Vehicle Safety Acts and any other applicable standards and/or regulations. The County of Monmouth reserves the right to request certification indicating the unit bid has been certified and tested to meet these requirements, with proper documents attesting to said certification.

The County of Monmouth shall, at its discretion, require qualified bidder or bidders to demonstrate exact equipment bid, at a site designated by the County of Monmouth within two (2) weeks after receipt of said request. **Failure to demonstrate equipment, if requested, will result in bidder being rejected.**

The County of Monmouth shall, at its discretion, require qualified bidder or bidders to submit a list of references who have purchased similar make/models being offered to the County of Monmouth. **Failure to supply list of references, if requested, will result in bidder being rejected.**

Facilities:

Bidders shall represent a manufacturer, which has in operation a factory adequate for the manufacture of the equipment, which it proposes to furnish. The manufacturer(s) whose associated equipment or products are bid, shall have a full service warranty and parts supply facility, located within a reasonable distance of the Division of Fleet Services, Freehold, New Jersey. This facility will be required to establish an in-house warranty program and provide all warranty work related to the equipment in the bid. The bidder shall submit the location, names and telephone numbers of people who are authorized to service the equipment or can be reached for emergency service.

Location: JESCO, INC 118 ST NICHOLAS AVE, SOUTH PLAINFIELD, NJ 07080

Phone Number: (908) 578-9554 Contact: JOE PEREZ

Manufacturer's Production Sheet:

The successful bidder shall furnish one (1) copy of the actual Factory Production Sheet, for each unit furnished. The copies of the Production Sheet shall be submitted at the time of the County of Monmouth inspection of unit.

General Instructions:

No Dealer advertisements shall appear on the unit and manufacturer's logo, decals, and/or advertisements shall be approved by the County of Monmouth prior to installation; **NO EXCEPTIONS.**

Errors and Omissions:

Inadvertent omissions and/or errors, which may require changes in the attached specifications, must be brought to the attention of the County of Monmouth Director of Public Works and Engineering **BEFORE** bid submission date. All questions shall be answered in writing, to all prospective bidders by addendum. Verbal responses shall not be binding.

Following the award, should the successful bidder discover any errors or omissions in the work undertaken and executed by him/her, he/she shall immediately notify the Director of Public Works and Engineering, who shall promptly verify the same. If, with the knowledge of such error or omission and prior to the correction thereof, the bidder proceeds with any work affected thereby, he shall do so at his/her own risk. The work done shall not be considered as work done under and in performance of this agreement, unless and until approved and accepted in writing, by the Director of Public Works and Engineering.

It is the responsibility of the furnishing vendor to deliver a complete, operative and efficiently functioning unit.

Specifications Deviations or Substitution:

These specifications are not intended to be restrictive, but are meant to describe the type of unit required for use by the County of Monmouth. **Bidders are warned, however, that failure to carry out the provisions noted herein will be deemed sufficient reason to reject a bid.**

Further, these specifications address the minimum performance requirements of the County of Monmouth. The County of Monmouth will consider alternate products, provided that they meet these minimum performance requirements.

(If bidder is basing his proposal on equipment other than what is specified and wishes the equipment he/she proposes to be considered as an "Approved Equivalent", he/she **shall** submit on a separate sheet in the **exact** format of the specifications contained herein, an item description, including the make, model and manufacturer's name of that which he/she proposes to substitute. For purposes of comparison, include only those items on each sheet as given in these specifications. Such bidder **shall also include**, but not as a substitute for the above, manufacturer's literature and specifications.)

It shall further be the responsibility of the bidder, when offering an alternate, to furnish proof via manufacturer's drawings, blueprints, certifications, etc., that such is equal or superior to the units specified. **Failure to submit the description or deviations as listed above will mean the bidder intends to supply the particular item as designated in the specifications and the County of Monmouth will so demand. No substitution will be permitted after receipt of the bids.**

EXCEPTIONS: N/A

All standard and optional equipment listed shall be Original Equipment Manufacturer's items when available. **NO EXCEPTIONS.**

Paint:
All painting shall be done in conjunction with manufacturer's specifications. Paint shall be applied at the factory.

EXCEPTIONS: N/A

After market refinishing will not be accepted. **No Exceptions.**

Manuals:

Two (2) complete sets of operation manuals must be supplied with total order in CD-ROM and hard copy form. One (1) owner's manual shall be in each unit.

EXCEPTIONS: N/A

Training:

It shall be the responsibility of the successful bidder to supply all safety, operational and service training to County of Monmouth personnel in accordance with all applicable ANSI and OSHA regulations. The safety and operational training shall consist of a complete review and understanding of the manufacturer's owner manual, along with actual operation of the equipment. The instructors shall emphasize all the proper set up use. The successful bidder shall supply a complete written outline of the training program, which shall be provided to the County of Monmouth. The successful bidder shall also make available to the County of Monmouth any future schools and/or seminars. The training shall take place at 250 Center St., Freehold, New Jersey and the training shall be scheduled by the County of Monmouth.

EXCEPTIONS: N/A

Delivery:

Each unit shall be delivered F.O.B. to the County of Monmouth after pilot model approval. The unit shall receive **all** pre-delivery preparation at the successful bidder's facility prior to final delivery to the County of Monmouth. Delivery within **90 days** after receipt of purchase order.

EXCEPTIONS: N/A

The successful bidder shall supply a list of authorized service facilities for training simulations which are near the Division of Fleet Services, Freehold, New Jersey.

EXCEPTIONS: N/A

Warranties:

All units, including optional components and accessories, delivered to be guaranteed to be free from defects in materials, design and workmanship for a minimum period of two (2) years from final in-service date. **Failure to provide the above minimum warranty requirements will result in rejection of bid.**

If warranty service is required, the successful bidder who supplied the unit shall provide pick up, delivery, and repair of unit(s) at no charge to the County of Monmouth. The successful bidder shall submit copies of the warranty being supplied to the County of Monmouth.

If bidder is supplying an alternate warranty than described in these specifications, a detailed description shall be provided with bid proposal. **Failure to supply information requested with bid will result in rejection of bid.**

EXCEPTIONS: N/A

Compatibility Clause:

The successful bidder shall be responsible to ensure compatibility with existing John Deere construction equipment currently in use by the County of Monmouth. **(NO EXCEPTIONS)**

The following specifications are for Three (3) Construction Equipment Simulators. The simulators shall all have the following basic systems, including the following Five (5) Construction Equipment Programs:

The Three (3) Construction Equipment Simulators shall include the following **basic systems:**

1. Immersive Displays – The view from the seat shall match the view from the cab of an actual machine. All simulators shall have choice of single or 3 display options for maximum engagement.

2. Structure – Simulators shall be made of steel frame for class room or trailer use.
3. True to Life Controls – Simulators shall be able to convert to a new machine in minutes with easily swappable controls. The following simulator control sets shall be included: Backhoe, Crawler Dozer, Excavator, Wheel Loader and Motor Grader.
4. Motion Platform – Simulator to be mounted on motion platform replicating the motion and vibration experienced while traveling, digging and lifting.
5. Operator Touchscreen – Touchscreen to be provided which allows the student to log in between training exercises. It shall also act as equipment interface, including simulated gauges, monitors and switches.
6. Design – PC components to be shock mounted inside the simulator, footprint shall be minimal with no cables for tamper proof plug and play training.
7. Full motion platform integrated with the simulator. The simulator shall be able to swap out controls for various machines. The motion platform shall provide a realistic response to every on screen action.
8. Simulator shall not be more than 30 5/8 inches wide and shall be transferable via forklift and fit thru a standard doorway.
9. Each simulator shall be equipped with a television monitor stand which is capable of holding three 55 inch televisions
10. Each simulator shall come equipped with three (3) 55 inch televisions for each of the simulator stands

The **Five (5) Construction Equipment Programs** shall include the following Learning Programs and Performance Measurements:

1) Wheel Loader Simulator Program: The Wheel Loader Simulator Program is to be based on and compatible with existing John Deere equipment currently in use at the County and shall include the following learning programs:

1. Controls familiarization
2. Bucket positioning
3. Earth moving and transport
4. Moving a load with narrow forks
5. Loading/Unloading a flatbed with forks

6. Moving a load with wide forks
7. Feather bedding into a trench
8. Truck loading
9. Loading/Unloading onto a lowboy trailer
10. Excavation
11. Using the quick coupler
12. Stockpile management

Performance Measurement – Trainers to be able to measure key student metrics such as:

1. Tasks completed
2. Completion time
3. Collisions
4. Fuel Consumption
5. Idle time
6. Cycle time

2) Excavator Simulator Program: The Excavator Simulator Program is to be based on and compatible with existing John Deere equipment currently in use at the County and shall include the following learning programs:

1. Basic controls familiarization
2. Swing, boom and stick control
3. Loading/unloading from trailer
4. Picking up and handling loads
5. Pipe placement in trench
6. Travelling and positioning
7. Bench loading into a haul truck
8. Trenching for foundation work

Performance Measurement – Trainers to be able to measure key student metrics such as:

1. Completion time
2. Volume of material excavated per bucket load and in total.
3. Movement efficiency and accuracy
4. Pendulums and collisions
5. Maximum shock loads
6. Fuel usage

3) Backhoe Simulator Program: The Backhoe Simulator Program is to be based on and compatible with existing John Deere equipment currently in use at the County and shall include the following learning programs:

1. Basic control familiarization
2. Picking up and handling loads
3. Loading trucks
4. Unloading flatbed truck with construction forks
5. Stringing pipe and craning
6. Backhoe digging and trenching
7. Coupling attachments

Performance Measurement – Trainers to be able to measure key student metrics such as:

1. Completion time
2. Movement efficiency and accuracy
3. Pendulums and collisions
4. Maximum shock loads
5. Volume of material excavated per bucket load and in total.
6. Fuel consumption, cycle time and idle time

4) Grader Simulator Program: The Grader Simulator Program is to be based on and compatible with existing John Deere equipment currently in use at the County and shall include the following learning programs:

1. Basic controls familiarization
2. Loading and unloading from trailer
3. Windrow management
4. Material spreading
5. Leveling with obstacles
6. V ditch operations
7. Stuck in mud

Performance Measurement – Trainers to be able to measure key student metrics such as:

1. Blade efficiency
2. Blade contacts with wheels or obstacles
3. Grade quality
4. Idle time
5. Cycle time
6. Fuel consumption

5) Bulldozer Simulator Program: The Bulldozer Simulator Program is to be based on and compatible with existing John Deere equipment currently in use at the County and shall include the following learning programs:

1. Basic control familiarization
2. Setting correct blade angle
3. Maintaining material in front of blade
4. Excavating a drainage inlet
5. Excavating a transversal ditch

6. Trailer loading and unloading

Performance Measurement – Trainers to be able to measure key student metrics such as:

1. Completion time
2. Blade efficiency
3. Track spin
4. Collision and other safety violations
5. Contact with power lines, personnel, or vehicles
6. Fuel consumption, cycle time and idle time

Exceptions: N/A

Delivery and installation shall be at designated Monmouth County facility.